

AgTech Forum 2016: break through innovations for Ukraine's agriculture

On June 10, 2016 the first all-Ukrainian forum on high technologies for agriculture - **AgTech Forum 2016** - took place in the National Complex "Expocenter of Ukraine" within the framework of the XXVIII International Agricultural Exhibition "AGRO-2016". AgTech Ukraine Association organized the venue with a support of the Ministry of Agrarian Policy and Food of Ukraine

Syngenta and Live AG were premium sponsors of the event.

Official sponsors: BITREK, eFarmer, IN-AGRO Consulting and Green Team.

Partners of the event: InVenture Investment Group, SmartFarming, Drone.ua, CIS Events Group, Baker Tilly, Deloitte, Vodafone, EBA, Obolon, Eurofins, Genetic Plant Cells, TVIS, IoT Hub, A3 Tech, Vismar Aqua, Agroport, Systems Solutions, and HiTech Agro.

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The occasion gathered **more than 300 participants**. Among the participants were agricultural producers, representatives of the process engineering sector, agro-service, consulting and distribution companies, IT companies and system integrators, banks, financial and insurance companies from all over Ukraine.

The starting panelists were Vladislava Rutitskaya, Deputy Minister of Agrarian Policy and Food of Ukraine on European Integration; Nicolas Perrin, Adviser of Agriculture of the Embassy of France in Ukraine; Timofey Milovanov, Professor of the University of Pittsburgh's economy and the president of the Kyiv School of Economics; Viktor Galkin, a marketing specialist of Syngenta company; and Yuri Petruk, head of AgTech Ukraine Association.



The core message appearing in every speech was a statement: a synergy of high technology and agriculture of Ukraine brings a great chance to occupy a winning position in the relatively new niche. Ukraine has all the necessary resources, including intellectual capital. It was presentable to hear Syngenta company sharing the notion on the tremendous potential and challenges ahead in the advancement of agro-technologies. Thus, the company tries to back every initiative aimed at the further developments in agriculture.

In the Demo zone one could find software, gadgets and other equipment from Ukrainian technological companies such as eFarmer, BITREK Meteo, and DroneUA. At this, 9 innovative projects displayed UA-born solutions for agricultural sector, 6 of which were generated during All-Ukraine Khakaton of Agricultural Innovations organized by AgTech Ukraine in spring 2016:

These are:

Kray Technologies (software for self-driving drones to aerial application of crop protection products)

BioSens (sensors for rapid diagnostic test on food safety)

UABERRY (automated framework design for growing strawberries and fertigation systems)

Grain Track (software for grain traders)

AgriEye (fields mapping using drones with an originally designed camera)

WattCMS (detectors of environmental conditions)

Fractal (visual application builder for programming and interaction of "smart devices")

Petiole (instant measurement of a leaf surface area using a mobile phone)

Fishing Buoy (smart buoy for ponds and other waters, which measures water temperature, its chemical characteristics determining time for feeding of fish and prevents water pollution)



The forum consisted of 5 sections formed accordingly upon subjects that cover the most topical technological products and services for the agricultural sector nowadays.

Yuri Petruk opened **the first section** of the "Electronic systems of accounting and planning" with a brief overview of the trends in agro software development. Artem Belenkov, the CEO of Smart Farming, continued the topic presenting a report on the ways of management of a land bank, electronic records, and mapping of fields. Andrey Ivanchikov, the CEO of IN-AGRO Consulting, focused his presentation on optimizing accounting and planning in agricultural production with the help of reference in electronic form field journals, maintenance requirement cards, bookkeeping and time management. Leonid Polupan, head of Vodafone Ukraine, completed the first section, presenting telecommunications solutions for the agricultural sector based upon M2M information exchange technology.

The second section was devoted to the fields' non-uniformity and the dynamics of growth and development of plants. Oksana Tonkha from Eurofins started with a summary on modern methods of agrochemical mapping of soils with a help of technological equipment and software. Oles' Jasinski, head of operations at TVIS company, continued with a story on the use of satellites to monitor the state of the fields. He showed available categories of accuracy of the pictures taken, explained the pros and cons, the spectrum of exposure and key indicators which are used in crop production. Valeriy Yakovenko, founder of DroneUA, added to the previous speeches information about the use of drones in agriculture. He also introduced a new product for the agricultural zoning of fields based upon satellite data. Maxim Mayarchuk, the CEO of Live AG, spoke about some new initiatives of Svarog West Group HTI Holding which incorporates Live AG, Genetic Plant Cells and A3Tech and focuses on the development of innovative products for the agriculture. And finally, Eugene Spizhenko presented real case depiction of fertility mapping of fields in the case of land plots belonging to Svarog West Group.

Equipment technology was a theme highlighted in **the third section** of the forum. The first speaker was an engineer Aleksander Bulavka from BITREK. He introduced an innovative GPS-monitoring system, which significantly exceeds the capabilities of all existing systems available by the number of parameters which the system measures. Aleksander described how it can help to significantly improve the resource allocation and influence the operational efficiency of a farming company. eFarmer representative Alexey Bogatyrev introduced AgTech Forum participants with a unique navigation solution by Ukrainian developers; he also spoke about the parallel driving, remote control driving and also piloting technics. And in general, he described key challenges to increasing the efficiency of the agricultural business by the use of IT software solutions. Sergey Danilchuk told about Hawkeye technology from Raven, which allows controlling each spray nozzle separately to ensure absolute uniformity of cumulative distribution. The last speaker of the section was Vladimir Babchenko, head of System Solutions Company, who elaborated on the accuracy of navigation signals for positioning and automatic control of equipment on fields.

The fourth section comprised presentations on environmental monitoring and resource management. Yuri Petruk, head of AgTech Ukraine association told about modeling of diseases and pest control with a help of metering at weather stations, as well as modern methods of soil moisture monitoring and irrigation control. Denis Sazonov, General Director of Green Team, shared information about new technologies which are used in the largest vegetable stores in Ukraine and he put emphasis on the importance of sensor detecting in vegetable storage. Alexander Baskov, a senior consultant at Baker Tilly Sustainable Development, presented the developments of energy efficiency management in the agricultural sector and attracting of investments into energy-saving technologies.

The final panel of AgTech Forum examined high-tech solutions for livestock breeding. Tom O'Callaghan, an international expert on animal husbandry, in his presentation disclosed a feasibility study revealing why livestock requires high technology solutions - it enables to reduce

production costs and increase output - as it was put in a real showcase of dairy cattle. Kristina Kuznetsova, from Datalab Agro, presented software product "electronic livestock" highlighting benefits of using it for livestock farms. At the conclusion of the forum, Lubomir Haydamaky, the CEO Vismar Aqua, made presentation on automation performance in aquaculture and underscoring opportunities that they make for the producers.

Comments:

"During AgTech Forum we tried to show the participants a detailed picture of how modern technologies can be integrated into the agricultural sector and the way those technologies should interact with each other. This time, we did it on the basis of products and services that are the most relevant for Ukraine in the meantime. And I am sure that this list will increase in number, as progress does not stand still. Previously, those who used the advanced technologies were far ahead, but now the situation changed in a way that the one who does not use technology is far behind. The world we live in today depends upon technology and the future is hard to imagine without it", says Yuri Petruk, the chairman of AgTech Ukraine Association.



«AgTech Forum is a nationwide and large-scale event where high technology solutions unite with the agricultural sector. For us, it is important to tell the farmers about modern technologies once again. Modern farmers have to apply high tech solutions in order to remain competitive. In addition, we continue to focus on the importance of increasing the agricultural rate of output, together with export issues of products with a high value added. It reflects the reality that agro sector is in high need of new and effective solutions », said the Deputy Minister in her opening speech.

«Ukrainian IT specialists have developed solutions enabling the agricultural sector to work efficiently and reduce consumption of fertilizers, as well as improve the quality of crops. The application of IT solutions allows farmers to save up to 30% of the funds. These are real calculations from the leading experts. So now the time has come to take advantage of best practices of Ukrainian inventors. Synergy of agriculture and IT - this is not the future, it is rather present time», added Vladislava Rutitskaia.



"Conducting of AgTech Forum has become another important step forward in the promotion of new and competitive niche in Ukraine, that is, the high-tech sector in agriculture. Admitting general sluggishness of Ukrainian agricultural sector in respect of high tech industry, there are market representatives who look at the mid-term prospects, and they are aware that the use of high tech solutions is the most powerful factor input to increasing the efficiency and competitiveness of agricultural production. It is very promising that young Ukrainian technological companies and projects are actively developing and implementing IT solutions in the agricultural sector of Ukraine. Moreover, these IT products and solutions are focused on the export potential", said Alexey Oleynikov, managing partner of InVenture Investment Group and co-founder of AgTech Ukraine Association.

Source: inventure.com.ua