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前沿资讯

1．智能农机赋能“山地精作” 贵州打造“农业大脑+智慧耕种”

简介：5月24日，贵州省丘陵山区适用小型机械研发制造推广应用先导区建设暨贵州（贵阳）山地智能农机产业发展工作机制第二次会议在贵阳召开。旨在推动贵州省“丘陵山区适用小型农业机械研发制造推广应用先导区”建设，省市共建贵州（贵阳）山地智能农机创新发展平台，助力山地智能农机全产业链发展。

中国工程院院士罗锡文、中国农业大学工学院教授宋建农、贵州省农业农村厅副厅长方涛、贵阳市委副书记滕伟华及相关领导出席活动，贵阳市人民政府副市长冉斌主持会议。

“贵州（贵阳）山地智能农机创新发展平台”正式启动，该平台由贵阳市农业农垦投资发展集团有限公司作为实施主体，从农机研发制造、市场销售、推广应用三端谋划布局，成立研发制造中心和推广应用服务中心，即“一平台两中心”。

记者从会上获悉，贵州（贵阳）山地智能农机产业园占地面积100余亩，园区主要开展农业装备研发制造、适应性改造、农机熟化定型、农机交易、农事调度、农机技术培训、零配件供应等业务。目前，产业园建有贵州省首个最大的山地农机交易市场，设置专家工作站、适应性改造车间、熟化定型基地等。

省农业农村厅农机管理处、贵阳农业农村局分别对《省农业农村厅关于支持贵州(贵阳)山地智能农机产业发展的指导意见》《关于支持山地智能农机产业发展的十条措施》进行解读。

会议认为，贵州（贵阳）大力发展山地智能农机产业，需要按照“研发制造智能化、推广应用集成化、作业服务社会化、政策支持精准化”的思路，激发各类农机主体活力，探索形成巩固强化农业机械产业链、供应链的有效机制模式。

围绕《贵州省山地智能农机装备短板研发需求清单（第一批）》，罗锡文院士结合贵州（贵阳）农机产业现状，从加强顶层设计、利用贵州（贵阳）自然资源禀赋、研发科技创新、应用推广等方面提出了建议和意见，并在会上作主旨分享。

“贵阳的定位是要全产业链发展山地智能农机产业，从项目储备、研发制造和推广应用等全环节上都要围绕轻简、多功能、智能化的目标，打造自主可控、高质量、高效能的智能农机装备产业链供应链。另外，北斗在农业领域的应用前景广阔，为加速传统农业向智慧农业转型，为农机装备产业的转型升级提供了技术支撑，贵州将在社会化作业补贴中试点开展北斗机具的应用。”省农业农村厅副厅长方涛指出，按照一年打基础、两年上台阶、三年见成效的要求，项目化推进各项重点工作，搭建面向全省的山地智能农机创新发展平台、建设一批具有多种类型农机应用场景的熟化定型和推广应用基地，研制改进一批丘陵山区适宜农机具，建成立足贵阳、面向全省的丘陵山地农机交易大市场。先导区建设既是机遇也是责任，需要不断探索创新，为丘陵山区农机装备研发制造、熟化定型、推广应用三位一体新机制新模式探路子、摸经验。

会上，省山地智能农机公司与中国农业机械化科学研究院集团有限公司签约；省山地智能农机公司与华南农业大学（罗锡文院士团队）签约；贵阳市政府向罗锡文院士颁发聘书；省农业农村厅向贵阳市农投集团授牌“贵州（贵阳）山地智能农机创新发展平台”；中国农业大学向贵州省农机技术推广总站授牌“中国农业大学教授工作站”。

会后，参会人员来到贵州（贵阳）山地智能农机产业园进行观摩，现场入驻农机企业、商户28家，展出100余台套大、中、小型农机设备，涵盖“耕、种、管、收、烘”全生产过程的农机需求。

此次活动由贵阳市农业农垦投资发展集团有限公司主办，贵州省山地智能农机产业发展有限公司承办，贵州省农机服务协会、贵州省农业机械学会、贵州新三农农业装备有限公司、贵州吉峰农机有限公司等单位协办。

来源：多彩贵州网·众望新闻讯；中国农业机械化信息网；

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http://agri.nais.net.cn/file1/M00/03/6F/CsgkOWZf4pSAaszrAAWEyTLrMgc282.pdf

2．提升设施农业机械化智能化水平！江苏举行田间推广日活动

简介：为进一步提升江苏省设施农业机械化智能化水平，服务设施农业、智慧农业、绿色农业高质量发展，5月22日，江苏省农机具开发应用中心在镇江组织召开了全省设施农业机械化智能化发展交流座谈会，并举办了蔬菜生产机械化智能化装备技术田间推广日活动。

会上，各市县（区）分别介绍了当地设施农业机械化发展现状、政策支持、产业发展典型案例，机械化智能化推广应用中存在的问题、建议以及下一步工作思路。通过交流研讨，大家一致认为设施农业机械化智能化的发展应重点考虑设施、品种、模式的“宜机化”，突破移栽收获等机械化薄弱环节应用难题，不断加强农机农艺融合、推广适用性强的机械化生产模式，加强农业机械化人才（特别是农机操作手、专业维修保养人员）培训，探讨发展设施农业机械化社会化服务的新路径，智能装备发展应该立足当前实际生产需要和未来发展方向同步发力推进相关工作。

省农业农村厅二级巡视员张耀春表示，当前江苏省设施农业发展依然存在一些瓶颈，要强化演示推广，以市场需求为导向，联合生产企业、基地园区、科教单位共同开展展演示活动；与此同时，还要强化研产用推一体化思路，依托研发制造推广应用一体化先导区建设，加强各单位紧密合作，一体化推进设施农业的机械化智能化。在强化农机农艺融合方面，需要联合种植业、种业、信息化等部门，开展农机农艺农信农数等技术融合研究，解决设施“宜机化”改造、农机农艺不配套等难题，全方位提升设施农业机械化水平。

本次田间推广日活动现场，展演示了设施农业生产土壤处理、耕整、种植、田间管理、收获搬运等环节的土壤火焰消毒机、灭茬还田机、深翻机、自走式撒肥机、精密直播机、全自动移栽机、叶菜收获机、搬运机等30多台套高性能、绿色节能农机装备，重点演示了耕整地机器人、自动取苗蔬菜移栽机、智能植保机、自主导航叶菜收获机、自动跟随运输车等智能化装备，初步构建了设施农业机械化智能化应用场景，活动现场还免费发放省农机应用中心编印的《设施农业（蔬菜）机械化装备技术应用指南》《设施农业机械化作业技术规范汇编（第二版）》等100余册，受到了基层推广技术人员和种植农户普遍欢迎。

来源：江苏广电融媒体新闻中心；中国农业机械化信息网；

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全文链接:

http://agri.nais.net.cn/file1/M00/10/41/CsgkOGZf4jKAOrsrAAXL7-tnLZI592.pdf

3．Carbon Robotics Named to the 2024 CNBC Disruptor 50 List（Carbon Robotics入选2024年CNBC颠覆者50强名单）

简介：Carbon Robotics, a leader in AI-powered farming, has been recognized on the 2024 CNBC Disruptor 50 list. The CNBC Disruptor 50 is a prestigious honor recognizing the fastest-growing and most innovative private companies that are transforming their industries and the world through technology. Carbon Robotics' inclusion underscores its pivotal role in revolutionizing farming worldwide and establishing new benchmarks for innovation and sustainability in agriculture.

Building on a record-breaking year in 2023 with a tripling of its LaserWeeder sales, Carbon Robotics has continued accelerating its growth in 2024. The company has broadened its reach, expanding to more than a dozen top growers across Europe and Australia, and has rolled out significant advancements to its AI field robotics and AI farm operations products. These include the Track LaserWeeder, designed for muck soil conditions, the Carbon Ops Center, which offers visual spatial data metrics for crop and weed management, Carbon Companion mobile app and multi-language support across its products.

This CNBC Disruptor 50 recognition is the latest in a series of notable achievements for Carbon Robotics thus far this year. In March, the company was distinguished as one of America's Top Greentech Companies 2024 by TIME and Statista, reinforcing its leadership in sustainable technology. Last week, NVentures, NVIDIA's venture capital arm, made a strategic investment in Carbon Robotics.

"We are honored to be recognized by CNBC as a Disruptor 50 company," said Paul Mikesell, CEO and founder of Carbon Robotics. "AI is revolutionizing agriculture, helping solve farmers' biggest challenges today and ensuring the health and supply of food for the future. We're proud to be leading this disruption that improves the business of farming and the quality and availability of food for consumers worldwide."

Carbon Robotics' flagship product, the LaserWeeder, uses advanced artificial intelligence and laser technology to identify and eliminate weeds without chemical herbicides. This approach increases efficiency and crop yield for farmers and promotes environmental sustainability by reducing chemical usage and supporting healthier soil ecosystems. Carbon Robotics is driving the future of sustainable agriculture, helping farmers protect crops, soil, people and the planet.

The CNBC Disruptor 50 list showcases today's most innovative companies reshaping their industries. Carbon Robotics joins this prestigious roster after a thorough evaluation based on extensive quantitative and qualitative criteria, alongside insights from CNBC's editorial staff and international entrepreneurial experts.

For the complete list of Disruptor 50 companies, please visit www.cnbc.com/cnbc-disruptors.

来源：Carbon Robotics；Global Ag Tech Initiative；

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全文链接:

http://agri.nais.net.cn/file1/M00/03/6F/CsgkOWZf4dqAcRGXAAKDiOFHRXO230.pdf

4．First Sprayer with One Smart Spray's Weed Management System Launched in Brazil（巴西推出首个智能杂草管理系统喷雾器）

简介：One Smart Spray announced that Stara has launched the first crop protection sprayer in Latin America to feature its precision weed management system, according to Future Farming. The system was unveiled at the recent Agrishow in Ribeirao Preto, Brazil, on Stara's Imperador 4000 Eco Spray crop protection sprayer.

The new Stara sprayer fully integrates One Smart Spray's technology, which utilizes a camera-based system and artificial intelligence developed by Bosch to enable real-time detection and spraying of weeds during the same pass, selectively spraying herbicides only where weeds are present instead of the whole field.

The system features the digital and agronomic intelligence of xarvio Digital Farming Solutions including its weed distribution and as-applied area maps, recommendations for herbicide programs and application windows, automated documentation, intelligent sensitivity levels, among other functions. The Imperador 4000 Eco Spray enables farmers to spray 24/7, day and night, due to a LED lighting system and offers performance in both pre-emergence (green-on-brown) and post-emergence (green-on-green) application.

One Smart Spray　a joint venture of Bosch and BASF　was established in 2021, joining the hardware, software and connectivity capabilities from Bosch and the digital and agronomic expertise of BASF. The commercial launch of the Imperador 4000 Eco Spray is the culmination of a collaboration between Bosch, BASF Digital Farming and Stara that goes back to 2019, which has focused on developing and integrating the One Smart Spray weed management technology.

来源：Future Farming；Global Ag Tech Initiative；

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5．Key Takeaways from CNH Collaboration With Intelsat for Expanded Network Connectivity（CNH与国际通信卫星组织合作扩大网络连接的主要收获）

简介：Editor's note: In a recent issue of Upstream Ag Professional, agribusiness analyst Shane Thomas shares his take on CNH's collaboration with Intelsat and how the partnership aims to provide farmers with ubiquitous internet access via ruggedized SATCOM service. Here's a summary of that article:

The recently announced collaboration between CNH Industrial and Intelsat to provide internet connectivity for tractors marks a significant step in agricultural technology. This initiative, set to launch in Brazil in the latter half of 2024, mirrors a similar partnership between John Deere and SpaceX's Starlink announced earlier in 2024.

The significance of connectivity in modern farming cannot be overstated. With the increasing reliance on agtech solutions, ubiquitous internet access on farm equipment becomes a vital enabler. CNH's solution will be offered as an aftermarket kit for existing tractors, combines, and sprayers, aiming to bridge the connectivity gap for farmers.

While specifics on pricing and speed guarantees are yet to be disclosed by CNH, Intelsat's capabilities boast peak download speeds of 100 Mbps and peak upload speeds of 20 Mbps, with latency under 600 msec. This level of performance is deemed more than adequate for precision agriculture applications.

The pricing model for CNH's offering remains undisclosed, sparking curiosity within the industry. Speculations arise regarding a potential razor-and-blades-esque approach akin to Deere's strategy with Starlink, where the initial hardware is priced competitively, leveraging recurring revenue from advanced precision products and services.

The advent of connected machines heralds a plethora of benefits, ranging from improved data reporting and real-time modeling to enhanced autonomy and remote support. Over-the-air software updates, reminiscent of Tesla's approach, promise continuous improvement and convenience for farmers.

This move towards enhanced connectivity not only facilitates technological advancements but also fosters an environment supportive of agtech providers. With connectivity hurdles minimized, the industry stands to benefit, promising a more efficient and innovative agricultural landscape. CNH's embrace of this trend signals a promising trajectory for the future of farming technology.

For more in-depth coverage, visit Upstream Ag.

来源：Shane Thomas； Global Ag Tech Initiative；

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全文链接:

http://agri.nais.net.cn/file1/M00/10/41/CsgkOGZf4M2AXyJpAANRyxpR7cg758.pdf

6．Carbon Robotics to Help Revolutionize Farming with AI, Using Investment from NVentures(利用NVentures的投资，Carbon Robotics将和人工智能(AI)助力农业革命)

简介：Carbon Robotics, a leader in AI-powered farming, today announced that it has received an investment from NVentures, NVIDIA's venture capital arm. This underscores the power of AI in transforming farming worldwide, as well as Carbon Robotics' leadership and innovation in the industry. Carbon Robotics' LaserWeeder has been proven by top farmers to reduce weed control costs by 80 percent and significantly increase crop yield and quality. By providing farmers with an innovative weeding solution that does not rely on traditional methods of chemical herbicides, hand labor, or soil cultivation, Carbon Robotics is at the forefront of using AI to protect crops, people, and the planet.

Leveraging the power of 24 NVIDIA GPUs, the LaserWeeder processes 4.7 million high-resolution images per hour, offering unparalleled AI-driven plant detection and identification to target and eliminate weeds with lasers. The LaserWeeder can eradicate 5,000 weeds per minute with sub-millimeter precision and utilizes the world's most diverse and fastest-growing agricultural image dataset, comprising 25 million labeled plants and more than 30,000 crop and weed models. The LaserWeeder also captures real-time metrics on crops and weeds and sends them to the cloud, providing farmers with actionable visual insights into their field farming operations at any time, from anywhere.

“With this investment, and using the power of AI, we can help farmers create farms and food systems of the future that are more productive, efficient, healthy, and profitable,” said Paul Mikesell, CEO and founder of Carbon Robotics.

“AI and advanced robotics have immense potential in addressing the myriad of challenges present in agriculture,” said Mohamed “Sid” Siddeek, corporate vice president and head of NVentures. “Carbon Robotics’ innovative solution improves farming practices to increase sustainability and improve the quality of produce available to consumers.”

来源：Carbon Robotics；Global Ag Tech Initiative；
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