



2019年第40期总207期

粮食和食物安全专题

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▶ 前沿资讯

1 . CRISPR might be the banana's only hope against a deadly fungus (CRISPR可能成为香蕉抗击致命病毒的唯一希望)

简介: The race to engineer the next-generation banana is on. The Colombian government confirmed last month that a banana-killing fungus has invaded the Americas — the source of much of the world's banana supply. The invasion has given new urgency to efforts to create fruit that can withstand the scourge. Scientists are using a mix of approaches to save the banana. A team in Australia has inserted a gene from wild bananas into the top commercial variety — known as the Cavendish — and are currently testing these modified bananas in field trials. Researchers are also turning to the powerful, precise gene-editing tool CRISPR to boost the Cavendish's resilience against the fungus, known as Fusarium wilt tropical race 4 (TR4).

来源: nature

发布日期:2019-09-24

全文链接:

<http://agri.ckcest.cn/file1/M00/0E/C9/Csgk0F2NqVmAFBQVAAes420NKZ8916.pdf>

2 . Schools add local foods to lunch menu (学校在菜单中加入当地食物)

简介: Mary Jo Hainstock believes school lunches can be nutritious and fresh, and if things go as planned, her students will be eating even more locally grown food. Hainstock, who serves as superintendent for the Vinton- Shellsburg Community School District in Benton County, Iowa, is part of a team working to connect the school and local growers. The goal: adding more locally grown fruits and vegetables, as well as locally raised meat. Vinton-Shellsburg recently received a Farm to School grant from the USDA to assist in planning the program in the district. "We have had a fairly active Farm to School chapter here for four years," Hainstock says. "We had this as a goal, and the grant really helped us refocus on what we wanted to do."

来源: Agupdate

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全文链接:

<http://agri.ckcest.cn/file1/M00/0E/C9/Csgk0F2NpkWAV8aNAAOFppsW4W8508.pdf>

3 . Institutions increase use of local foods (机构提高当地食物用量)

简介: Eberly, head chef for University Housing at Southern Illinois University, is keen on using foods sourced locally and has made it his passion. He certainly practices what he preaches. "Anything I can get my hands on, I'll take it," he said. "I like to spread it around the community. We want to let people know that we're not just buying off the shelf." Eberly contracts with 10 to 15 local farmers to provide him with meats and produce. Additionally, he is a big customer of the extensive operation at University Farms to help source foods

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served to hundreds daily in the two on-campus cafeterias. SIU is among many large institutions making an effort to source more food locally. Other schools, hospitals and government offices have begun the move into local sourcing.

来源: Agupdate

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全文链接:

<http://agri.ckcest.cn/file1/M00/OE/C9/Csgk0F2NqLuARn16AALTUkZqHSM606.pdf>

➤ 学术文献

1 . Food quality traceability prototype for restaurants using blockchain and food quality data index (使用区块链和食品质量数据指标为饭店提供食品可质量追溯产品原型)

简介: As competition between organizations are evolving into competition between supply chains, to survive and indeed grow, it is necessary to deliver added value to customers. Traceability has emerged as one of the key measures of operational efficiencies within supply chains and ultimately, customer service. Over the years, organizations have deployed number of methods in delivering food traceability. This paper examines major methods of food traceability currently in existence and proposes a restaurant prototype for implementing more reliable food traceability using Blockchain and product identifiers. The prototype captures data from various stakeholders across the food supply chain, segregates it and finally, applies the Food Quality Index (FQI) algorithm to generate an FQI value. The FQI value helps in identifying whether the food is good for consumption on specified parameters. FQI value is generated based on extant standard storage and handling regulations specified by food safety authorities, and checks whether value so derived, is within the permissible range. The prototype helps in grading food quality for human consumption besides strengthening food (product) traceability. This prototype can be customized to address future requirements of traceability triggered through new information emanating from any stakeholder or the node in the supply chain.

来源: Journal of Cleaner Production

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全文链接:

<http://agri.ckcest.cn/file1/M00/OE/C9/Csgk0F2NpzuAckgJAAppQpeRJ5Q764.pdf>

2 . National food security through corporate globalization: Japanese strategies in the global grain trade since the 2007-8 food crisis (全球化合作下的国家粮食安全: 自2007-8年粮食危机后全球谷物贸易中的日本战略)

简介: English-language research on the contemporary global grain trade says little about Japan. Japanese firms, however, have made extensive overseas investments in grain production and trading since 2007, becoming major players in the soya trade between

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North and South America and China, and the Japanese state has developed policies promoting 'foreign agricultural investment' in grains. This paper documents and explains these developments by exploring the legacies of earlier Japanese grain trade moves, examining three visions of the relationship between foreign agricultural investment and Japan's food security, and arguing that conceptualizations of Japan as an 'Asian land grabber' fit awkwardly with the empirical record.

来源: The Journal of Peasant Studies

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http://agri.ckcest.cn/file1/M00/OE/C9/Csgk0F2NrViAH75bADS_6kpaZ4Q075.pdf