Xylella: gazdanövény adatbázis frissítése

Az EFSA elkészült két olyan munkával, melyek jelentősen kiterjesztik a Xylella fastidiosa növényi kórokozóra vonatkozó tudásunkat és megértésünket, amely Európa egyes részein gyümölcsfákat és más növényeket támad meg.

Az ügynökség kiadta a legújabb frissítését annak az adatbázisnak, amely azokat a növényeket tartalmazza, melyek a X. fastidiosa gazdaszervezeteként szolgálnak. A frissített lista 563 növényfajt tartalmaz, melyeket egy új szakirodalmi keresésen keresztül és az EU növény-egészségügyi hálózatának, a EUROPHYT-nek az értesítéseiből azonosítottak. 312 faj esetében a fertőzést legalább két kimutatási módszerrel azonosították.

A mostani lista a kórokozó mindkét faját – X. fastidiosa és X. taiwanensis – tartalmazza, és információval szolgál azokról a növényfajtákról, amelyek a Xylellával szemben ellenállóak vagy toleránsak.

Az adatbázis lényeges bizonyítékot szolgáltat a tudósoknak és kockázatértékelőknek, és támogatást nyújt a kockázatkezelőknek a monitoringban és más növény-egészségügyi intézkedésekben, mint például az ültetésre szánt növények vizsgálata.

Az EFSA Növényegészségügyi Testülete szintén frissítette a X. fastidiosa kártevő besorolását, amely része volt 2015-ben publikált kockázatértékelésének.

A frissítés tartalmazza a legfrissebb információkat a X. fastidiosa biológiájáról és terjedéséről az EU-n belül és kívül, valamint a bacillusgazda rovarok jelenlétéről és elterjedéséről Európában. Ezenkívül részletes információkat tartalmaz az európai járványokról és az érintett növényfajokról.

A X. fastidiosa új teljes kockázatértékelése befejezésének tervezett időpontja 2019 eleje.

Foodsafetynews.com:

FAO helps to improve fish safety in Ukraine

The Food and Agriculture Organization of the UN said based on findings of an assessment in 2016 and conversations with food safety authorities it identified a need for specific protocols in fisheries and food safety.

A project began in July 2017 with the State Service of Ukraine on Food Safety and Consumer Protection, the State Agency of Fisheries, the Association of Ukrainian importers of fish and seafood and the Association of Ukrainian Aquaculture Society.

It will devise consistent fish safety regulations, build capacity for inspections and for labs analyzing fish safety and train business operators. Work continues until April next year and is funded by Norway.

Last month, the Ukrainian Ministry of Health recorded the eighth death this year due to botulism which was linked to homemade fish. Since the beginning of the year, 80 cases have been reported. As part of the project, FAO has held two workshops to train Ukrainian fish inspectors. Esther Garrido Gamarro, a lead technical officer for the project, said training has been successful so far.

“We combined classroom training with field visits to fish markets where the inspectors could have hands-on training on the types of inspections they would carry out. This included an inspection of the fish market facilities, current practices, and organoleptic evaluation. This practical training with the group was an ideal way for the inspectors to test out their training in a real-life environment,” she said.

Fisheries and aquaculture play a significant role in Ukraine’s economy. In 2015, 8,600 tons of fish, crustaceans, fish products, and other aquatic invertebrates were exported from Ukraine with a value of $17.7 million, according to the FAO. Ukraine mainly exports fresh, chilled and canned fish to neighboring countries and only exports 98 tons of frozen fish to Europe. As the European Union and Ukrainian standards for fish safety and inspections are not harmonized, only a small percentage of Ukrainian fish exporters meeting EU requirements can export into that market.

Africa: wastewater can spread disease

Urban farmers growing vegetables in Africa could accidentally be helping to spread disease by irrigating crops with wastewater, according to researchers.

In a report published in the Environmental Research journal, the scientists found evidence in Burkina Faso canal water samples of virulent pathogens commonly responsible for waterborne diseases which could lead to people that are directly or indirectly exposed suffering from acute diarrhea, chronic gastritis and gastroenteritis.

If the water is used in food preparation, especially to wash vegetables that will be eaten raw, it can transfer pathogens and cause foodborne illnesses. Even if food is throughly cooked, some pathogens can remain infectious. Contaminated water can also cross contaminate utensils, thus transferring pathogens to food.

After identifying a range of antibiotic-resistant genes in the water, the research team concluded that using wastewater for urban agriculture in the city posed a high risk of spreading bacteria and antimicrobial resistance among humans and animals.

Metagenomics were used to investigate the microbial population, antibiotic-resistant genes and plasmids of medical interest in the wastewater.

For the wastewater study, University of Birmingham researchers in the United Kingdom led a team from the University Ouaga in Burkina Faso; University of Yaounde in Cameroon; and University of Trier in Germany.

They looked at wastewater samples from three open air canals near agricultural fields in three neighborhoods in the Burkina Faso capital of Ouagadougou. Samples were collected in October 2015 at the end of the rainy season.

Professor Laura Piddock, from the University of Birmingham's Institute of Microbiology and Infection, said wastewater appears to be a "hot spot" for antibiotic resistant bacteria in Burkina Faso.

"Using wastewater for agricultural irrigation represents a very serious health risk, not least as it increases exposure to fecal pathogens. We urgently need further investigations to determine the extent that exposed populations are affected by this health issue," Piddock said.

Dr. Blaise Bougnon, from the University of Yaounde, said urban agriculture relies on wastewater for irrigation because of its low cost, availability and so-called nutrient content.

"Some 200 million urban dwellers are reported to be engaged in urban agriculture worldwide and, in some cases, produce up to 90 percent of cities' demand for perishable vegetables," according to UN research. "Over 80 percent of domestic and industrial wastewater generated in low and middle-income countries is discharged untreated into the environment."

Eleven pathogen-specific and 56 virulence factor genes were detected in wastewater samples. These virulence factors are usually found in human pathogens that cause gastroenteritis and/or diarrhea.

The identified virulence factor genes are commonly carried by E. coli, Shigella spp, Clostridium perfringens and Mycobacterium tuberculosis. The pathogen-specific virulence factors belonged to Streptococcus agalactiae, C. perfringens, M. tuberculosis, Legionnela pneumophila, Shigella spp, S. flexneri, Yersinia enterocolitica, and Bartonnella henselae.

In low and middle-income countries 842,000 people die annually from diarrhea, according to the World Health Organization in 2017, because of inadequate water, sanitation and hygiene.

Double number of incidents from July to September

The International Food Safety Authorities Network (INFOSAN), managed by the Food and Agriculture Organization (FAO) and World Health Organization (WHO), was part of 32 food safety events versus 16 from April to June. These events covered 141 WHO member states compared to 32 in the previous quarter.

Peter K. Ben Embarek, INFOSAN management, department of food safety and zoonoses at WHO, told Food Safety News that the rise was mostly due to one incident.

"The increase of countries involved can largely be attributed to the outbreak of listeriosis linked to frozen vegetables from Hungary that were subsequently distributed to 120+ countries, an event in which INFOSAN played a large role in facilitating information exchange between exporting and recipient countries," he said.

"The number of events INFOSAN manages does not follow specific patterns. We have indeed seen a larger than a usual number of events during the first half of 2018 but without any specific reason identified yet."

The INFOSAN Secretariat worked with the European Rapid Alert System for Food and Feed (RASFF) and its own members in exporting countries to identify and share details with recipient countries.

INFOSAN said the outbreak served as a reminder to consumers that frozen raw vegetables should be cooked or heat-treated properly before consumption. Greenyard ran the frozen vegetable factory linked to the Listeria outbreak that affected 54 people in six countries, killing 10 of them. Production has since restarted.

In July, the INFOSAN Secretariat attended the 41st Codex Alimentarius Commission meeting in Rome to host a side event. The role of the network in the Listeria outbreak in South Africa linked to ready-to-eat meat and Salmonella outbreak traced to Lactalis infant formula made in France was discussed.

In the same month, a workshop about the creation of an Arab Rapid Alert System for Food and Feed (ARASFF), developed under the Arab Food Safety Initiative for Trade Facilitation (SAFE) was held in Tunis, Tunisia. Twenty-five participants from 13

countries in the Eastern Mediterranean and northern Africa attended to discuss the future of ARASFF and the interface it will have with INFOSAN.

New Zealand plans shake-up of food recall system

New Zealand Food Safety wants feedback on proposals to strengthen food recalls and improve risk-based plans and programs in the country.

The Ministry for Primary Industries (MPI) said the objective is to make improvements to the food safety regulatory system and help protect New Zealand's reputation as a supplier of safe food. Consultation on the proposals is open until Dec. 7, 2018.

Head of New Zealand Food Safety, Bryan Wilson, said the consultation is about setting clear expectations for businesses in preparation for and during a recall, as well as making food safety requirements clearer and more accessible to all parties.

"Our food safety system is very important to all New Zealanders and has a strong reputation. It works to protect consumers from foodborne illnesses and to ensure food is safe and suitable. A key component of that reputation is that we are continually working to improve it," he said.

Plans would extend the requirement for recall procedures to include all exporters of food, clarify what traceability procedures should cover, require mock recalls to be held annually, adjust how long traceability records should be kept for and how quickly information must be shared during an incident.

Wilson said it wants to find the most effective way to improve recalls and risk-based plans and programs based on lessons learned from the WPC incident.

"Adopting these requirements will decrease the impact of any unsafe food on consumers and also reduce costs during a food safety incident. We also want to avoid placing unnecessary compliance burdens on businesses, and we are consulting to understand what the impacts of these proposals would be on businesses."

EFSA-news:

Multi-country outbreak of Listeria monocytogenes linked to consumption of salmon products

Ready-to-eat salmon products, such as cold-smoked and marinated salmon, are the likely source of an outbreak of Listeria monocytogenes **that has affected Denmark, Germany and France since 2015. EFSA and the European Centre for Disease Prevention and Control (ECDC) used whole genome sequencing to identify the** multi-country outbreak.

By 8 October 2018, 12 cases including four deaths had been reported in the affected countries.

In August 2017, Denmark reported the first cluster of cases linked to the consumption of ready-to-eat smoked salmon produced in Poland. Control measures were implemented and other EU Member States and competent authorities were informed.

In October 2017 France reported the detection of the same strain of Listeria in marinated salmon originating from the same Polish processing company as identified in the Danish outbreak investigation.

The most recent case linked to the outbreak was notified in Germany in May 2018.

Due to the lack of whole genome sequencing data from the environmental and food samples taken at the Polish processing plant, it is not possible at present to confirm whether the contamination occurred in the suspected plant. Moreover, until information on the Norwegian primary producers of the salmon used in the contaminated batches has been reported and assessed, the possibility of contamination at primary production level cannot be excluded.

The identification of the same Listeria strain in a salmon product in France and a new human case in Germany suggest that the source of contamination may still be active and that contaminated products have been distributed to other EU countries than Denmark. Pregnant women, the elderly and immunocompromised people are at higher risk of contracting listeriosis.

EFSA-conference closes: 'Collaborate, collaborate, collaborate'

"The main message for me was 'collaborate, collaborate, collaborate', because it is not enough to have good science," said Bernhard Url, EFSA's Executive Director, following the agency's conference, Science, Food, Society.

He added that the conference had exceeded his expectations and he was "still overwhelmed by the breadth and diversity of the views" he had heard.

Dr Url was speaking at the end of the four-day event in Parma, Italy, which was attended by more than

1,100 delegates from around the world and followed by another 800 via live video link.

Discussions roamed across a range of issues, from new horizons in risk assessment science to engaging and communicating with society and developing expertise for the future.

Earlier, he had told the audience: "We must continue to defend and improve the quality and value of our science in the face of disruptive events and instability."

He compared the conference to a four-day scientific cruise that had called at a string of fascinating new islands. It would take time to absorb all the lessons learned on the journey but it had been an invigorating, stimulating experience.

Dr Url added that the conference had yielded plenty of ideas and insights that would help EFSA to address the challenges and uncertainties ahead.

"There is a lot of fragmented knowledge out there," he told delegates. "But the past four days have been a good example of co-creation; we generated lots of ideas and collaborative thinking."

A full report of the conference outcomes will be published in due course. Video recordings of the various sessions will be available to view on the EFSA website in the coming weeks.

Lumpy skin disease in cattle: from containment to elimination

EFSA has assessed the most effective strategies for eliminating lumpy skin disease (LSD) now that the outbreaks in south-eastern Europe have been contained.

A report published today gives advice on the ideal duration of vaccination programmes to eliminate the disease, and looks at the probability that the disease will reappear and at possible surveillance methods.

Outbreaks of LSD in the Balkan region fell dramatically by 95 percent from 7,483 in 2016 to 385 in 2017. In 2018 no outbreaks were reported in south-eastern Europe, although one outbreak was reported in the European part of Turkey.

The report says that the more effective the vaccination is in protecting animals against the disease – and the more herds are vaccinated – the shorter the vaccination programme can be. For example, if the vaccination is effective for 80% of vaccinated animals, a two-year programme with coverage of 90% of herds is sufficient.

The probability that LSD will reappear after a vaccination programme is mainly linked to the likelihood of infected animals being introduced from neighbouring affected areas. Other factors examined in the report include the possible persistence of the virus in vectors (such as ticks and insects) or in the environment.

The report also gives an overview of surveillance methods. These include measures for early detection of new cases and how to demonstrate absence of disease.

Xylella: host plant database updated

EFSA has completed two pieces of work that substantially expand knowledge and understanding of Xylella fastidiosa**, the plant pathogen that is attacking fruit trees and other plants in parts of Europe.**

The agency has published the latest update of its database of plants that act as hosts for X. fastidiosa. The updated list includes 563 plant species identified through a new literature search and from notifications to the EU's plant health interception service EUROPHYT. For 312 of the species, infection has been identified by at least two detection methods.

The list now covers both species of the pathogen – X. fastidiosa and X. taiwanensis – and includes information on plant varieties that are resistant to, or tolerant of, Xylella.

The database provides essential evidence to scientists and risk assessors and supports risk managers in carrying out surveillance and other phytosanitary measures, such as inspections of plants for planting.

EFSA's Panel on Plant Health has also updated its pest categorisation of X. fastidiosa, which was part of its risk assessment of the pathogen published in 2015.

The update includes the latest information on the biology and distribution of X. fastidiosa inside and outside the EU, as well on the presence and distribution of insect vectors in Europe. It also includes detailed information about the European outbreaks and the plant species affected.

A new full risk assessment of X. fastidiosa is scheduled for completion in early 2019.