Foot and mouth outbreak continues

Lax 'biosecurity' on farms is allowing foot and mouth disease to bounce back in Britain. Chief Scientific Officer, David King, warned that there was no sign of the epidemic coming under control, and random movements of animals, people and machinery are still spreading the virus. He cited a case in Devon where four apparently unconnected cases were eventually linked to a single person transporting machinery between farms. These fears were underlined by Roy Anderson, an epidemiologist at Imperial College London, who has found evidence of a change in the spatial spread of the epidemic. Instead of spreading predictably from farm to farm, outbreaks are popping up at random, which he considers must be caused by movements of people or vehicles. It is feared that unless the heat-labile virus is wiped out by the end of the summer, it could return with a vengeance as temperatures fall. *CK*
http://www.newscientist.com/news

What lies beneath?

A research team led by scientists from the University of Georgia and Georgia Tech sunk to great depths last month in the name of microbial ecology. The team used a four-person submersible called the Johnson Sea Link II to reach methane vents and brine pools in the Gulf of Mexico. The submersible's robot arm was used to collect sediment cores for analysis. Little is known about the microorganisms that live in either of these extreme environments. A better understanding of the microbiology of the cold seeps, where methane bubbles out from fractures in the ocean floor, could provide valuable clues about global warming. Methane that escapes to the surface of the water without being oxidized could contribute to the greenhouse effect. However, the methane oxidation rate in the water column above the vents has never been measured. The team's progress while stationed aboard the Harbor Branch Oceanographic Institute's research vessel Seward Johnson was webcast in July. *AV*
http://www.eurekalert.com

Q fever confirmed

The Public Health Laboratory Service in England and Wales has received reports of three confirmed cases of Q fever. The individuals concerned worked on farms assisting with the culling of cattle and sheep as a result of the foot and mouth disease epidemic and were cared for in the Northumberland region. Two of the cases are fully recovered and one is still receiving treatment. Q fever is caused by *Coxiella burnetii* and is transmitted through contact with animals, most commonly, sheep, cattle and goats in Europe. Fortunately, it is generally a self-limiting illness, and many people suffer a very mild infection with no symptoms. If symptoms are present they are usually similar to a 'flu-like illness or pneumonia. However, in a few cases the potentially fatal complication of chronic endocarditis can occur. *CK*
http://www.phls.co.uk/news/index.htm

A healthy fixation

Spirochetes could play a previously unrecognized and significant role in nitrogen cycling. A research team led by John Breznak of Michigan State University has reported in *Science* that spirochetes can fix nitrogen, which would account for nitrogen fixation in the termite guts inhabited by the spiral bacteria. The National Science Foundation-funded study also revealed that many free-living, aquatic spirochetes fix nitrogen. Nitrogenase homologs were found in spirochetes of the rumen and those that inhabit the human mouth, although these bacteria did not perform nitrogen fixation. *AV*
http://www.nsf.gov/od/lpa/news/press/01/pr0154.htm
http://www.science.org

Hep B plant opens

A new hepatitis B vaccine manufacturing plant, a Russian–Belgian collaboration, was inaugurated in Moscow in June. 'SB-Biomed' is the result of a joint venture between GlaxoSmithKline (GSK) and local Russian partners Biomed and Immunogen. The plant's activities will include the filling of vaccine ampules, labelling, packaging and the performance of quality controls on Engerix B (GSK's recombinant hepatitis B vaccine) destined for the Russian market. The plant has an annual filling capacity of 4 million ampules and a packaging capacity of up to 9 million doses of Engerix B. *CK*
http://corp.gsk.com/

A clean apple a day

The barbecue season is often accompanied by an increase in the incidence of food poisoning. Fruits and vegetables, however, can also harbour dangerous pathogens. As consumers' tastes become more 'exotic' and the global trade in food increases, food microbiologists expect pathogens from developing countries to make their way into the developed world more often. Poor sanitation and water-quality make it difficult for many countries to provide bacteria-free produce. Thus, thoroughly washing fresh produce is crucial. Interestingly, research findings presented at the recent Institute of Food Technologists annual meeting showed that water was just as effective as a commercial produce-wash for removing *Shigella boydii* from parsley and cilantro. It seems that the physical manipulation of produce during washing is the main factor in removing the pathogen. *AV*
http://www.eurekalert.org/pubnews.php?start=50

Global Health Fund announced

The European Community is committed to supporting a new international fund for HIV/AIDS, malaria and tuberculosis. The Global Health Fund is intended to mobilize, manage and disperse financial resources to enable developing countries to achieve more rapid progress in preventing these major infectious diseases. The Fund will be open to contributions from government and private donors, and will provide support to beneficiary countries based on defined eligibility criteria. It is to be an alliance of partners working from existing institutions under the collective responsibility of a governing board. At the time of writing, it was envisaged that the Global Health Fund would be politically launched at the G8 summit in Geneva in July, with the aim of being operational and receiving the first financial contributions by the end of the year. *CK*
http://www.eurosurv.org/update

