

## Citrus fruits endangered by HLB

**Keywords:** citrus fruits; endangered; HLB.

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NATIONAL HLB PREVENTION PROGRAM (PNPHLB for its acronym in Spanish). Citrus growers, who have been engaged in this activity for generations, are threatened by HLB, the most destructive citrus disease for which there is no cure. The advance of the disease in some citrus productive areas of Argentina is very worrying, and the establishment of such disease without any type of control measures can cause a 40% reduction in productive capacity in 5 years.

To protect the national citrus production, Senasa (**National Agrifood Health and Quality Service**) coordinates and executes the National HLB Prevention Program (PNPHLB for its acronym in Spanish), created by Law 26,888, since 2010. To this end, a surveillance and monitoring system has been implemented for the early detection of HLB and its vector (*Diaphorina citri*), which to date has more than 472,349 sites monitored and almost 60,855 samples taken, of which 1,314 plant samples and 67 Insect samples were positive for the presence of *Candidatus Liberibacter asiaticus*. In addition to the visual inspection of HLB and its vector, the surveillance system has a network of 317 trapping sites for monitoring the insect vector in areas where it is absent, along with a complementary network from the Obispo Colombes Agroindustrial Experimental Station (EEAOC) and the private sector, to join the official network of SENASA, and which has approximately 3,600 monitoring sites in commercial citrus orchards in Tucumán, Salta and Catamarca, and some 87 sites in the urban trees of Tucumán, in order to detect the incursion of the pest and to be able to implement measures for its containment and/or eradication.

*Diaphorina citri*, Kuwayama (Hemiptera: Liviidae) is the main vector of the bacterium causing HLB. Direct damage results from sap extraction, while the indirect and primary damage is done by transmitting the pathogen that circulates through the phloem of the plants. Detection of the insect is fundamental to determinate its presence and/or take control decisions. There are different techniques for its monitoring: visual inspection and sticky color traps. The former allows searching for the vector in its three states: eggs, nymphs and adults, while the latter captures the adult only.

The analysis of the presence of this bacterium is carried out by the official laboratory network comprising INTA Concordia, Bella Vista, Montecarlo and Yuto, the EEAOC and the central Senasa laboratory.

This monitoring and the coordinated actions carried out by public and private Institutions that are part of the national citrus chain are key to the implementation of public policies that Senasa establishes to protect the national citrus production. What is more, they are the basis to prevent the spread of the disease, avoiding the impact on regional economies, allowing to face the appearance of outbreaks of the disease quickly and effectively. These efforts must be strengthened with the commitment of the producers, through the adoption of preventive measures such as lot monitoring, vector insect management, and the acquisition of certified plants.