Phytosanitary management of ambrosia beetles

The Complexes of Ambrosia Beetles, known as Redbay Ambrosia Beetle of Laurel Wilt (*Xyleborus glabratus-Raffaelea lauricola*) and the polyphagous borer beetle (*Euwallacea* sp. - *Fusarium euwallaceae*), are potential pests for the production of avocado, a crop of high economic value for Mexico since it is the leading producer and exporter of the product, as well as other hosts worldwide. Given the phytosanitary risk that the Ambrosia Beetle Complexes represent and their association with symbiont fungi, the Senasica has maintained since 2013 epidemiological surveillance actions for its timely detection.

The polyphagous borer beetle is present in California, United States of America and Israel. The first report in Mexico was in February 2015 in the municipality of Tijuana, Baja California; subsequently, in 2017 it was registered in the municipalities of Playas de Rosarito, Ensenada and Tecate.

Therefore, since 2018, the Ambrosial Phytosanitary
Management program has been implemented in Baja
California aiming to implement management actions to limit
the progress of the Polyphagous Borer (*Euwallaceae* sp.) in the
national territory. Monitoring of the polyphagous borer beetle in
the rest of the country where the pest is not present and of the
redbay ambrosia beetle, is performed through the
Phytosanitary Epidemiological Surveillance Program

The polyphagous borer beetle, also known by its English name as Polyphagous Shot Hole Borer (PSHB), is native from Southeast Asia and it is vector from *Fusarium euwallacea*, *Graphium* sp. and *Acremonium* sp., an association that causes a disease known as regressive 'Fusarium wilt'. The PSHB attacks more than 300 tree species, of which 110 are susceptible to the regressive death by Fusarium, causing, among other damages, the death of trees.

With the actions of the program, the risk to spread and settle the pest in other States of the Mexican Republic is reduced. Also the avocado cultivation area, its production and supply within the national and international market is protected as it is a susceptible host in which the pest can reproduce, in addition to being susceptible to other (non-reproductive) species of agricultural importance such as sweet orange, olive, peach, loquat, pecan walnut and vine.