

# Sorghum yellow mite

The sorghum yellow mite (*Melanaphis sacchari*) is considered by the International Plant Protection Convention as a pest of economic importance that damages sorghum, oatmeal, sugarcane, wheat and barley crops and that has as rice, corn and Johnson grass, among others, as secondary hosts.

This species was officially identified in Mexico in February 2014, in the municipalities of Jimenez, Rio Bravo and San Fernando in the State of Tamaulipas, and from April of that same year the phytosanitary control of sorghum was implemented to reduce the levels of infestation of the pest and mitigate its risk of dispersal to other free zones in the country. In 2015, the National Service for Agro-Alimentary Public Health, Safety and Quality (SENASICA), through the General Directorate of Plant Health (DGSV) authorized operations of the Campaign against the sorghum yellow mite to benefit sorghum producers in Coahuila, Chiapas, Durango, Guanajuato, Jalisco, Michoacán, Morelos, Nayarit, Nuevo León, Oaxaca, Puebla, Queretaro, San Luis Potosí, Sinaloa, Sonora, Tamaulipas and Veracruz.

The use of biological control agents through induction or increase was introduced in 2016, based on the progress and results from research, studies and estimates of the sorghum yellow mite, through the release of insects of the Coccinellidae (ladybugs) and Chrysopidae (lacewings) on the field, in order to reinforce natural biological control and prevent the population explosion of the pest in the field. An operational strategy under a scheme of Integrated Pest Management (IPM) was

implemented in 2017 which, as defined by the International Code of Conduct on Pesticide Management, entails a “careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human and animal health and/or the environment”. Actions such as monitoring with sampling and exploration, the use of biological controls through increase (reinforce natural biological control), and chemical and cultural controls were included in the total project, having as basis the training aimed at producers.

The actions of the program will protect around 900 thousand sorghum hectares in comparison with 2016, when 260 thousand hectares were addressed. The yearly production of sorghum is 5,198.6 million tons, with an approximate value of 17,206.3 millions of Mexican pesos (SIAP, 2016).

The programmed actions for this fiscal year 2018 are: Pest monitoring (exploration and sampling), seed treatment, biological, chemical and cultural control, and training for technicians and producers with the aim to reduce populations in the sorghum crop and prevent damages to plants and a drop in production.