Myzus persicae Resistance Alert!

Aphid monitoring surveys in peach orchards conducted by Syngenta Crop Protection and Bayer CropScience have revealed that some populations of the green peach aphid (Myzus persicae) in Southern France and Northern Spain have developed high levels of resistance to neonicotinoid insecticides. The neonicotinoid class of insecticides includes the active ingredients; acetamiprid, imidacloprid, thiacloprid and thiamethoxam (IRAC MoA Group 4A), which are currently registered for the control of aphids in European stone fruit.

Although low level tolerance to neonicotinoids in green peach aphids has been reported for some time, these are the first cases of high levels of resistance affecting aphid control. Highly resistant samples of aphids have been identified in several peach orchards in the Languedoc-Roussillon, Provence-Alpes-Cote d’Azur and Rhone-Alpes regions of France as well as in the Catalonia region of Spain. The monitoring surveys have yet to identify any resistant aphids in other crops.

The management of neonicotinoid resistant green peach aphids in peach and other stone fruit crops is further complicated by the presence of pyrethroid and carbamate resistant aphids in the same regions. The IRAC Sucking Pest Working Group recommends that growers in affected regions do not use insecticides that are affected by resistance*. It is recommended that control of pre-flowering pests in these regions is managed with mineral oils. The post-flowering use of neonicotinoid insecticides when green peach aphids are present in the crop should also be avoided to prevent the further spread and intensification of resistance. It is recommended to use aphicides of mode of action classes locally not affected by resistance* in order to prevent the further spread and intensification of resistance in aphids on stone fruits and on other host crops.

In 2011, the IRAC Sucking Pest Working Group will continue to monitor the distribution and impact of resistant aphids, whilst working with local experts to develop practical pest and resistance management strategies.

*Consult local advisors for advice on which aphicides are affected by resistance in your locality.
 ** See IRAC poster on Myzus persicae resistance management

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