

2022–2023 Florida Citrus Production Guide: Fresh Fruit Pesticide Residue Limits¹

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Current production practices often include the use of various pre- and postharvest chemicals, many of which are pesticides. To be used, these materials must be labeled for use on citrus (see Chapter 45, *Pesticides Registered for Use on Florida Citrus*, <https://edis.ifas.ufl.edu/publication/CG017>) and used only according to label instructions. Chemical residues on the fruit after harvest are a concern to regulators and the public alike because of their potential negative health effects. Therefore, the United States and other countries set maximum residue limits (MRLs) on fresh produce for various chemicals. By US law, such materials must be applied according to label instructions, but doing so also means it is unlikely for US MRLs to be exceeded. However, when exporting product to a country that has lower MRLs than the United States, the use of these pesticides usually must be modified or discontinued to keep from exceeding the other country's tolerances. When no MRL or default tolerances are stated, any detectable residue will constitute a violation. The limit of detection for chemical residues on citrus fruit is often between 0.01 and 0.05 ppm, depending on the testing laboratory and chemical of interest. Violations may lead to rejected loads of product, restrictions on future shipments, and even increased scrutiny or requirements for the entire industry.

Because MRLs change frequently, see the UF/IFAS Postharvest Resources website (<https://irrec.ifas.ufl.edu/postharvest/index/pesticides.shtml>) for the most current list of MRLs (in parts per million) for various chemicals used on fresh Florida citrus destined for the United States and important export countries. This information is intended as an initial reference source, and no guarantee is made of its accuracy. Always verify these values with other knowledgeable sources within specific markets of interest. This website includes links to specific MRL databases for select countries and to a global MRL database (<https://bcglobal.bryantchristie.com/>) for the most comprehensive list of MRLs for all commodities and markets.

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