

What is Causing that Greasy Green Color on My Grapefruit?

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Take Home Message:

- Greasy-green looks very similar to rind blotch on grapefruit although the disease is unusually absent on the leaves.
- Spores and epiphytic growth on leaves were observed a similar time to what was reported in the literature but later on fruit.
- Degreening with or without cold treatments improves fruit color but not enough to remove green color from rind.

Effort Statement: Field data and post-harvest data have been collected. From preliminary data, greasy-green appears to be caused by the fungus that causes greasy spot/rind blotch.

Summary: In the last few years, 89% of grapefruit growers have struggled with a disorder that they refer to as greasy-green, leading to losses between \$20,000 to \$1.7 million per year. The disorder causes the fruit to have large, diffuse green patches on the rind after degreening, making it no longer suitable for the fresh market. The disorder visually resembles rind blotch, caused by the fungus *Zasmidium citri-griseum* (formerly known as *Mycosphaerella citri*), but when the trees are observed, there are few symptoms on the leaves. The cause of greasy-green remains unclear, but UF/IFAS started a project in Spring 2022 to determine if the *Z. citri-griseum* sporulation cycle was responding to changes in the host caused by huanglongbing (HLB), a warmer environment, or cultural practices. We will also be investigating

possible physiological changes or burns of the fruit in response to newer pesticide and nutritional programs that are commonly used to combat the effects of HLB. Last season, flush and fruit growth stages were monitored. Fruit and leaf samples were taken at each observation date to observe whether spores were present and germinating or if there was significant fungal growth and will be matched with the flush data. No disease was observed on the leaves but there was disease on the fruit. Post-harvest degreening trials were conducted. While degreening, with or without 24h at 38°F, significantly improved peel color compared to just 38°F or no treatment, a green color remained. Further experiments on the length of degreening time are being analyzed.

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