

fruit export grapefruit

game changer

An article titled “Grapefruit and Drugs: a Conversation” caught my attention recently. By Jon Roberts



Jon Roberts

The article, written by Ernie Neff in the *Florida, Citrus Industry News*, was intriguing not only because of its interesting title – associating grapefruit with drugs – but also because I suspected that the grapefruit being discussed may be Florida 914, which it was.

We imported this variety in 2014 after I had tasted it at a fruit tasting day at CREC, Florida University, Lakeland. Initially my main interest was the fantastic, sweet grapefruit flavour without the strong bitter naringin aftertaste of a grapefruit. Only on further enquiry, did I find out from Prof Gmitter, (featured in this article), that the cultivar, a grapefruit hybrid, had by default in the breeding process, ended up with a very low furanocoumarin content.

The reference to drugs in the article

is regarding the negative effect of taking certain prescriptive drugs with normal grapefruit due to the presence of furanocoumarin. There is now a growing list of medications that come with a warning regarding the consumption of grapefruit soon after taking medication.

In the last decade market research has shown a flattening demand for grapefruit worldwide. The fruit is, generally speaking, enjoyed more by the older population. It is also this demographic that is more likely to be on the kind of drugs that could be dangerous with consumption of grapefruit.

Initially it was thought that only statins such as Lipitor were dangerous but the list has grown over the years and medications for heart rhythm; some antibiotics such as Erythromycin, some chemotherapies, pain relievers and sedatives have been added to the list.

Normal processes in one's liver break down the medication, reducing the levels in the blood. The compound furanocoumarin found in grapefruit disrupts this process and actually increases the blood levels to sometimes dangerous levels. Many articles are available online, just type in grapefruit and medication (though the *SA Fruit Journal* cannot vouch for the scientific legitimacy of each one).

The Florida 914 red grapefruit is therefore not only a superior-tasting fruit compared to current grapefruit, but has levels of



Above and below right: Grapefruit tasting in South Korea

furanocoumarin equal to mainstream varieties of mandarin and oranges, putting it into the same safety and health bracket.

These two very important factors make Florida 914 a potential game changer for the grapefruit industry. Based on the article I read, Prof Gmitter had further thoughts about UF 914 (a hybrid grapefruit):

“My emphasis is on the excellent eating quality,” he said. “We tested UF 914 with consumer focus groups a few years ago. The groups were divided into grapefruit lovers and haters. The ‘haters’ said that if grapefruit always tasted like this, then they would buy it and eat it. The ‘lovers’ stated things like, ‘The best grapefruit I have ever tasted’ and ‘If I could buy this, I wouldn’t need to put sugar on my morning grapefruit.’”

Having tasted it, I believe many younger folk and even children will be enticed into trying this citrus type.

Without the furanocoumarin, the health benefits far outweigh the dangers. The grapefruit diet has shown good results in weight loss diets over many years. Researchers believe that the naringenin antioxidant in grapefruit helps the liver burn fat instead of storing it after eating, while

increasing the production of insulin. This mimics the process in long periods of fasting where fatty acids are broken down instead of carbohydrates. “Remarkably, naringenin is a dietary supplement with a clear safety record,” said study researcher Yaakov Nahmias of Hebrew University. “Evidence suggests it might actually protect the liver from damage.”

Sadly, due to the serious damage caused to the Floridian citrus industry by HLB, they have not been able to plant significant quantities of 914. Being a large citrus exporter, SA is well placed to become a serious player in helping Florida get this variety on the map. And as a counter-seasonal producer to Florida, SA will not affect their markets and may ironically even grow market recognition for their variety, for the day when their scientists crack ways to treat HLB and its vector, D. citri.

We have waited a very long time for the variety to pass through quarantine, but finally it is in the last stages of clean-up and will shortly be released to the Citrus Foundation Block, where it will undergo true-to-type testing and then multiplication for field trials. 

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The referenced article can be accessed here: <https://citrusindustry.net/2020/11/30/grapefruit-and-drugs-a-conversation/>