Citrus Granulation
January 12

**Question:** I have a 4 year old orange tree in my back yard. It's about 6 feet tall, with lots of fruits, and looks very healthy, but when I cut into the oranges they are very pithy. I have opened one up each month from October until February for the past 3 years and they are always that way. What am I doing wrong?
- Deborah W., Fort Myers

**Answer:** You are doing nothing wrong. This natural disorder is known as granulation. Granulation usually occurs on rapidly growing fruit. Navel, Valencia, grapefruit and mandarin hybrids are most frequently affected. Good fertilization and watering practices and early seasonal harvesting may alleviate this problem. The problem varies seasonally and is more of a problem on larger sizes or late blooming fruits. Drying appears to be associated with over-maturity, a lack of water, excessive tree vigor, and extended warm, and/or dry fall weather. Premature fruit drying is also associated with young trees, a condition that is alleviated with tree maturity.

Stephen Brown is a horticulture agent with the Lee County Extension Service. Submit questions by calling the horticulture desk at 461-7504 between 9 a.m. and 4:00 p.m. or by e-mailing brownsh@leegov.com. Visit his web page at [http://lee.ifas.ufl.edu/hort/GardenHome.shtml](http://lee.ifas.ufl.edu/hort/GardenHome.shtml), “Garden Doctor” video clips [http://lee.ifas.ufl.edu/Hort/Video.shtml](http://lee.ifas.ufl.edu/Hort/Video.shtml) and flowering trees information at [http://lee.ifas.ufl.edu/Hort/GardenPubsA_Z.shtml](http://lee.ifas.ufl.edu/Hort/GardenPubsA_Z.shtml)