Problem: Tomatoes, Hard Core

Host Plants: Tomatoes

Description:
Tomato fruit often develop a tough white core in the center under stressful conditions. Many older varieties produce a fruit with five distinct cavities, which are filled with seeds and surrounded by a jelly-like material called locular jelly. The walls between the cavities join in center to form the core. During stressful weather—usually aggravated by excessive fertilization—this central core becomes tough and turns greenish white. The walls also may become pale and corky.

Recommendations:
Many newer tomato varieties possess genetic traits to make the fruit meatier and firmer. The inside of the fruit becomes meaty all the way through, and seeds are produced in small cavities all over the inside of the fruit rather than in the five distinct cavities. These types of tomatoes do not seem to produce a hard central core nearly as readily as ones that are not as meaty.

The older variety, Jet Star, which has been widely grown for many years by Kansas gardeners, has a tendency to produce a hard core when stressed. We have received few reports of hard cores developing in many newer varieties such as Mt. Spring, Mt. Fresh, Merced, Sun Leaper, Sunmaster, Celebrity, Carnival, and other ‘semi-determinate’ varieties.

References:
1. Tomatoes with Green Core, University of Wisconsin, PlantDOC, July 24, 2012
2. Hot Weather Tomato Problems, University of Missouri, Missouri Environment & Garden, August 16, 2012

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