

Smart Stuff

with Twig Walkingstick



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Notes: Plus there also are tomato varieties that end up green when they're actually ripe. David Francis says they have something called the "green flesh" gene — "a gene that makes the light-harvesting pigment chlorophyll ["klor-uh-fill"] hang around long after it normally does." Read more about his research and see pictures of him and the people he works with at <http://www.oardc.ohio-state.edu/tomato/personnel.htm>. A geneticist studies heredity: the passing of genes from one generation to the next. Tomato varieties whose names give a clue to their color include Red Grape (not a grape), Yellow Pear (not a pear), Green Zebra (regrettably not a zebra), Solid Gold, Black Prince, Pink Beauty and Orange Blossom.

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Q. Dear Twig: What makes a tomato a certain color?

A. A combination of the **color of the skin**, either clear or orange, and the **color of the pulp**, the stuff inside.

For example, a tomato with clear skin and red pulp looks pink. One that has orange skin and red pulp looks red. Clear skin plus white pulp makes cream or off-white, while orange skin with white pulp gives yellow. Remember, tomatoes come in lots of colors.

In charge of it all are **genes**, says David Francis, who should know. He's a tomato breeder and geneticist ("juh-NET-ih-sist") at the Ohio Agricultural Research and Development Center.

"I'm not talking about 'jeans' as in pants but 'genes' as in the **unit of inheritance**,"

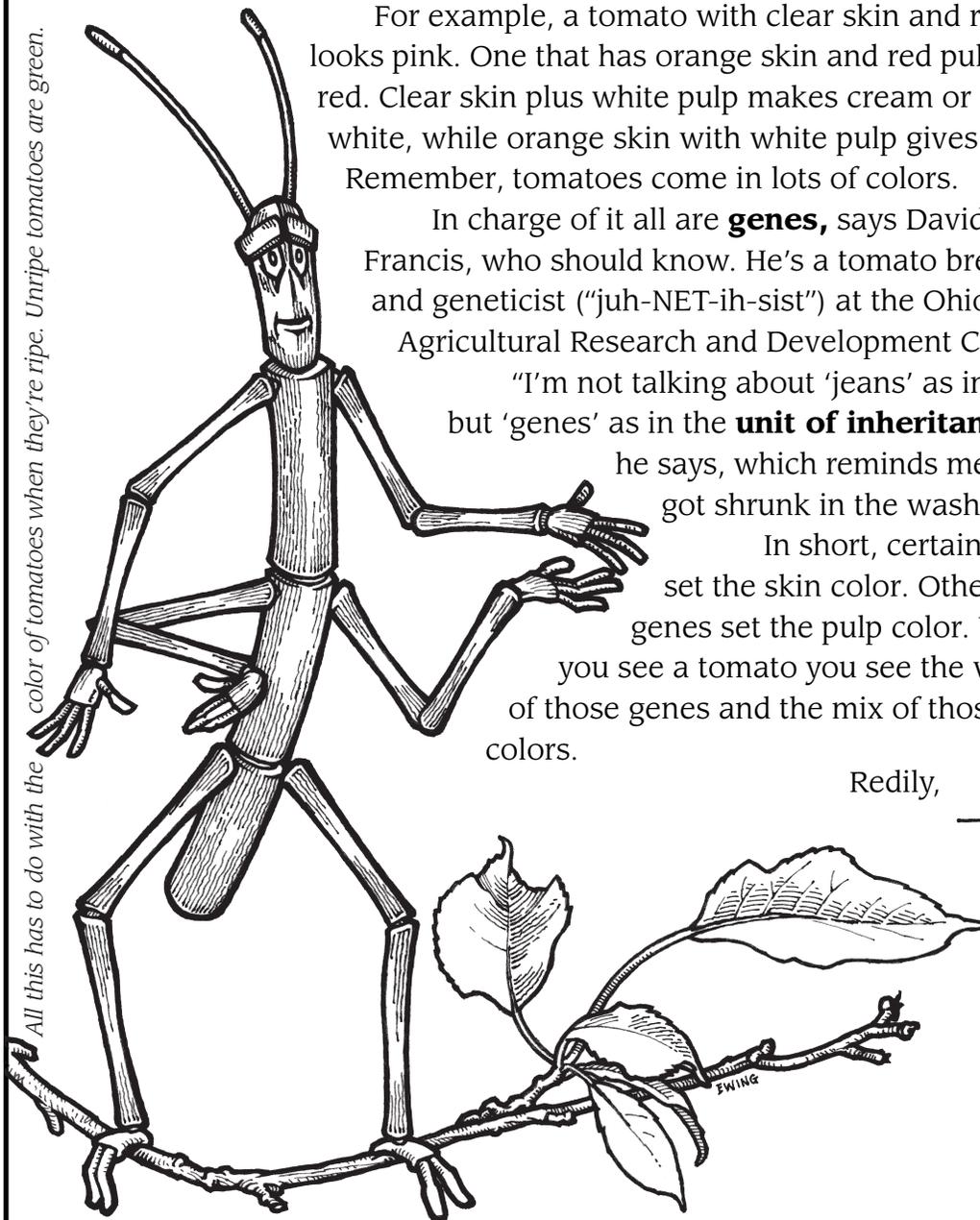
he says, which reminds me, mine got shrunk in the wash.

In short, certain genes set the skin color. Other genes set the pulp color. When you see a tomato you see the work of those genes and the mix of those colors.

Redily,

Twig

All this has to do with the color of tomatoes when they're ripe. Unripe tomatoes are green.



From your scientific friends at The Ohio State University — specifically, the Ohio Agricultural Research and Development Center (www.oardc.ohio-state.edu) and OSU Extension (extension.osu.edu).