

Gene silencing used to make better potato

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The Russet Burbank potato may soon be replaced by the Ranger Russet potato as the United States' top potato for french fries.

Caius Rommens, a plant scientist with the J.P. Simplot Co. of Boise, Idaho, and colleagues explain Russet Burbank has been the preferred variety for french fry production because of its excellent storage characteristics. Ranger Russet grows better with higher yields but stores poorly and bruises easily. The researchers used gene-silencing technology to modify the Russet Ranger without inserting any foreign DNA into the plant's genome.

They used the technique to reduce Ranger's production of enzymes responsible for poor storage and the unsightly bruising. In addition to being tastier, the scientists said french fries made from the new Ranger had lower levels of acrylamide -- a compound that has been a source of health concerns about fried foods.

The study is scheduled for the Jan. 10 issue of the Journal of Agricultural and Food Chemistry.

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