## Arctic apple founder proves GM crop can be developed on small budget

The Arctic apple is the creation of Okanagan Specialty Fruits, a eight-person company in Canada that scrimped and saved over 18 years to win approval for Granny Smith and Golden Delicious apples that, because of clever genetic engineering, don't brown as fast after they're sliced.

Most genetically modified organisms (GMOs) have been created by agrochemical companies that can spend heavily on developing and commercializing them. A 2011 study put the average cost of bringing a GM plant to market—including R&D, test plots, and wrangling with regulators—at about \$130 million.

That explains why of the 112 GM plants cleared by the U.S. Department of Agriculture, nearly half are now owned by a single company, Monsanto.

Neal Carter, the agricultural engineer who is president and founder of Okanagan, says his GM apples cost only \$5 million to \$10 million to develop, though that's not the true cost. He and his wife worked without pay for years. Their main cash business is a 60-acre, 100,000-tree orchard in Canada's Okanagan Valley.

"We were fleas on the side of an elephant," Carter says. "People looked at us and dismissed us, but now they say hey, wait—they actually did it."

The Arctic apple appears to be the first transgenic plant to be developed by a farmer rather than a university or big agrochemical company. But it may not be the last.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Creating a Better Apple