

The apple formerly known as 'SJCA38R6A74'

A new non-browning apple needs a name

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In 2003, AAFC held a Canada-wide contest to name a new apple variety. The event featured a media blitz, an apple-related Web site, a CD of AAFC apple research, colouring sheets for kids and apple postcards. *Name-the-Apple* captured the imagination of Canadians, attracting 10,000 entries. The name chosen was Aurora Golden Gala.



Our newest apple (known only by its code name SJCA38R6A74) was developed by **Dr. Shahrokh Khanizadeh** and his team at the Horticulture Research and Development Centre in St. Jean-sur-Richelieu in collaboration with AAFC staff in Guelph and Summerland. It too, needs a *real* name.

This time around, our name-the-apple contest is exclusive, open only to readers of AgriCulture. You are invited to review the apple's attributes as described below, and send your creative suggestions for a name by email to Dr. Khanizadeh (khanizadehs@agr.gc.ca) by **Oct. 31**. The winner receives a colourful poster featuring AAFC apples.

"The main objective of the AAFC apple and rootstock breeding program," explains Dr. Khanizadeh, "is to evaluate and release unique varieties different from and superior to those already on the market. 'SJCA38R6A74' is unique in several ways."

The 'SJCA38R6A74' apple is aromatic, sweet, juicy, firm and crisp, but its claim to fame is its resistance to browning, most likely due to low levels of phenolic compounds such as chlorogenic acid and epicatechin, the key substrates for enzymatic browning in apples. Mature fruit of 'SJCA38R6A74' does not fall off from the tree and even hangs on during the winter. Traditional crop breeding methods were used to transfer the genes responsible for the non-browning trait. The only existing cultivar that shows less browning after cutting is Cortland, second in popularity only to the McIntosh with Canadian consumers.

In laboratory tests, the new apple remained crisp with no signs of browning after two to three days at room

temperature. It will remain fresh in cold storage for up to five months.

“Together these qualities make it ideal for fresh eating in salads, packaged as dried apple chips or processed for juice,” claims Dr. Khanizadeh.

The trees are upright and semi-vigorous with wide angle branches. They are cold-hardy and can survive winter temperatures of -25°C . The trees show good resistance to powdery mildew, but may be susceptible to scab. In full bloom, the flowers are medium pink.

‘SJCA38R6A74’ fruit are medium to large size, averaging about 150 grams on non-thinned trees. The fruit skin has an average thickness, mainly washed red to dark red, fading at the edges, with a little marbling and striping, over greenish-yellow. The fruit matures in early October at Frelighsburg, a test site in Quebec .

‘SJCA38R6A74’ originated from a cross made in 1970 between the varieties ‘Linda’ and ‘Jonathan’.

A Canadian Plant Breeder’s Right has been issued and the trees will be available from licensed nurseries in Quebec . Non exclusive multiplication licenses can be obtained from AAFC, Saint-Jean-sur-Richelieu , Quebec .