

Two new promising scab free apple selections originating from INRA, France

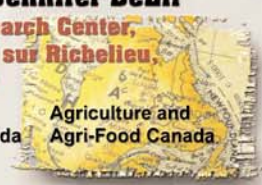
François Laurens, Yves Lespinasse

**INRA - C.R. d'ANGERS,
Unité d'Amélioration des
Espèces Fruitières et Ornementales,
B.P. 57 - 49071 Beaucauze Cedex - France**



Shahrokh Khanizadeh, Yvon Groleau,

**Johanne Cousineau, Jennifer DeEll
Agriculture Canada, Research Center,
430 Boul. Gouin, St Jean sur Richelieu,
Quebec, Canada J3B 3E6**



Several apple selections originating from European breeding programs were evaluated during the last 10 years at our station in Frelighsburg (Quebec). Two of the selections tested were from INRA - C.R. d'ANGERS (Unité d'Amélioration des Espèces Fruitières et Ornementales, France) and look promising for commercial trials.

X4362

(mutation of Reine des Reinettes)

Tree characteristics: hardy, upright-spreading, weak to moderately vigorous; leaves: elliptic, serrate to double serrate, underside very hairy, apex acuminate to cuspidate, base oblique, length : width ratio 1.57, petioles hairy and 2.2 to 2.6 cm long with long, thin stipules when young. Fruit characteristics: variable size ranging from small-medium to medium, average 123 g, flat-round-conic to oblate; basin: medium depth to deep, medium width; calyx: open, lobes persistent and flat, calyx tube conical, stamens in basal position; cavity: acuminate to acute, medium depth and width; stem: short to medium length, medium diameter; core: partly open, in median position, with meeting core lines; carpels: 25 mm height, 30 mm width; skin: very rough, medium thick, pale copper with streaks of faded red, mainly covered with fine russetting, average number of large and swollen lenticels give the fruit a rough appearance; flesh: firm, moderately juicy, greenish-white, with high discoloration after cutting; flavor: good; end use: good for fresh eating; ripens October 16 (Frelighsburg, QC).



X4982 (Florina x Gala)

Tree characteristics: hardy, upright-spreading, a little drooping at tips of branches because of fruit weight, moderately vigorous, tip bearing; leaves: ovate to lanceolate, mainly serrate, sometimes double serrate, underside hairy, apex acute to cuspidate, base obtuse, length : width ratio 1.98, petioles hairy and 2.5 to 3 cm long with short stipules when young. Fruit characteristics: moderately attractive, small to medium, average 112 g, flat-round-conic to oblate, ribbed along body and five-pointed; basin: prominently ribbed, medium depth, narrow to medium width; calyx: open, lobes persistent and erect, calyx tube funnel shaped, stamens in median position; cavity: acuminate, deep, narrow, with extensive russet; stem: short to very long, small to medium diameter; core: mainly closed, median location, with clasping core lines; carpels: 15 mm height, 20 mm width; skin: very thick, striped orange-red over green, with scant bloom, conspicuous medium size lenticels; flesh: very firm, crisp, juicy, greenish-white to yellowish-white and the with low discoloration after cutting; flavor: aromatic, sweet, tart, resembles Gala; end use: good for fresh eating; ripens October 16 (Frelighsburg, QC).



Additional information on Agriculture and Agri-Food Canada, Quebec fruit breeding and physiology program can be obtained from <http://www.pgris.com> or contact the author SK (Khanizadehs@em.agr.ca)