



New Variety Introduction Workshop

Ornamental Gardens – PARC
Summerland, BC
April 16, 2003

Purpose of the Workshop

To develop an approach to successful new variety introduction for Canadian growers that includes a strategy for:

- Market introduction and consumer awareness
- Funding
- Implementation

Note: BC farm size is small, therefore the need for high-value varieties is critical to the success and future of the industry. Access to outside varieties is becoming more limited as the result of exclusive arrangements and marketing clubs. All participants in the industry chain need to be profitable.

Conclusions

1. The Canadian tree fruit industry has an absolute need for new varieties to remain competitive in the world market.
2. Access to new varieties from elsewhere in the world is becoming increasingly restricted or impossible. Canadian breeding programs must be continued to keep our industry competitive.
3. A strategy or a plan for new variety introduction is critically needed.
4. As part of the strategic plan, market development and promotion is critical for any new variety.
5. A structure for new variety introduction is required. (It could be PICO, the New Variety Development Council or some other industry or international organization.)
6. There are funding challenges that need to be dealt with. Industry, growers and government need to work together to solve these issues.
7. A "champion" is needed for each variety. The challenge with AAFC cultivars is "Who is the champion?"
8. All participants in the new variety development chain need profitability and incentives - growers, packers/sellers/marketers, retail/wholesale, consumer, breeder/owner and the people of Canada.

Vertical integration is important in the strategic plan.

Recommendation

David Hobson proposed that PICO form a working group to develop a model for introducing a new variety. The group would be comprised of anyone who could help shed light on the problem e.g. AAFC, growers, BCTF, NVDC. One goal of the group would be to identify the gaps in the system, to decide what steps, in what sequence should be done, and who should do them.

Notes from the Workshop

Welcome to PARC - Frank Kappel

Breeding programs began in 1924 (apples) and cherries (1936). Breeding programs are a long-term effort and the continuity of the program is critical. Other species have also been introduced but the emphasis today is on the apple and sweet cherry programs in tree fruits.

BC Variety Introductions - J. Calissi

Goal: to allow BC farmers to remain competitive through the use of new variety technology.

BC has more acreage of new varieties than their competitors in WA. James identified winners and losers.

Quality Goal: To diversify into fruit with higher consumer appeal and better flavour and firmness. This is being achieved.

Budget: Varieties that return higher prices to farmer. Success has been achieved, more so in recent years.

Past: No single person or group developed and implemented plans for variety introduction. No written plans; no communications, and therefore introductions often failed. There was a general lack of focus without coordination between breeders, extension, growers, PICO.

Various breeding program cultivars, including those from PARC, and chance discoveries were introduced through gov't, packinghouses, growers, etc., but not coordinated. Communication was done on an informal basis. Technical issues (how to grow) were not addressed at the time of introduction, though remedial efforts solved those problems that could be solved. Packers were not properly prepared to receive product (different standards, problems with packing equipment/processes, not harvested at correct time, small quantities).

Quality Assurance and Support

Quality is measured by returns. PARC and OFS dealt with such problems through the development and introduction of new technologies.

Marketing

Consumer needs have not always been considered in the development of new varieties. Many varieties have had to overcome competition and success depended on the product differentiation, volumes, and international plantings. Marketing goals were unclear at the onset with different goals for different participants in the industry.

Sales

Farmers planted varieties without knowledge of market demand, without sufficient volumes to warrant retail participation, and variable quality.

What went right?

- Spartan
- Late season cherries
- Gala
- Ambrosia
- New varieties coming on stream
- Growers have demonstrated a willingness to adapt to new varieties
- There is a demonstrated ability to resolve technical issues quickly.

What went wrong?

- Long lag between early plantings and commercialization
- Lack of process from farmer to market
- Lack of marketing resources
- Lack of mechanism to finance launch
- Lack of communication between marketers and farmers
- Packers objected to increasing sku's
- Packers and marketers were slow to adapt. Growers took on the problem with New Variety Development Council and PICO.

Recommendations

- Need for better marketing information
- Need international market demand information
- Need for dialogue between various segments
- Strategy, planning, coordination.

Grower Perspective - Bruce Currie

During the season, some growers visit PARC. Breeders call meetings to display new varieties. Perhaps 5% or less of the growers, few packinghouse field staff, buyers, or marketers show up.

A few growers select a new variety and plant an acre or less leading to:

- small quantities of fruit;
- no coordination of packing
- no ability to evaluate packing line performance
- no ability to supply samples for consumer evaluation.

Suggestions:

A program for planting new varieties that shares the risk. Select 50 growers, each one plants one acre. In 3 years you have 1,000 bins. BCTF will promote a variety if they have 1,000 bins. NVDC promotes a variety if they have volumes. There should be a way to cover losses if a test cultivar fails. Presently all the risk is on the grower.

We need:

- (1) a development strategy for 8S6923, SPA440, Ambrosia, Silken (in their infancy now), Gala, Fuji (young adults), and Red Delicious and Macs (pensioners, whose days are numbered)
 - (2) consumer feedback on the new cultivars
 - (3) funding for introducing a new variety
- If the new varieties are not successful, the breeding programs will die and with it the BC fruit industry.
 - We have a history of what can be done with Ambrosia.
 - PICO isn't set up to develop marketing plans, and hasn't done so.

Introducing New Varieties - Christine Coletta

Chris' experience has primarily been with the wine and grape industries. There are many similarities to the old grape industry; high value can only be achieved by having varieties that consumers want and by promoting the quality and benefits.

There are probably 5% of growers who drag the industry along. The experience with Ambrosia has demonstrated what can be done. There wasn't an initial plan for Ambrosia. Ambrosia needed to be handled separately and uniquely. A specific strategy was developed to concentrate on the domestic market (lowest risk, cheapest, easiest to service). There wasn't a lot of funding available for domestic market introduction though there was some federal funding for international marketing (higher risk).

They did not recommend a certification program for Ambrosia. There is no negative image for BC apples so they thought the money could be better spent on marketing. There are no consistent standards for fruit quality. The key to success is for all parties to understand and apply what is needed to lead to high quality fruit on the consumer's shelf. Quality becomes more of a concern when the volume of fruit increases.

The retail industry indicated that there was a higher demand for Ambrosia than the supply. Efforts were concentrated at the trade show and media awareness level. There is still no mechanism to coordinate efforts with growers, packers, etc.

Christine recommended the need for a template for the new variety introduction at all stages of the process. It must include all the participants in the value chain. Funding is the biggest challenge. It was further recommended that the local, BC market is the first place to introduce because in the local market is easier to fix problems and that market is typically easier and cheaper to get started in.

The BC wine industry has succeeded in moving from a failing, small industry (19 wineries) to a thriving and growing industry (80 plus wineries). *A key to the success for grapes was the provision of provincial government funding. Other key elements (for Ambrosia) included the strong role of the organic industry in building a connection between producers and consumers and the ability of PICO to get a lot of different test plantings.*

Plant Breeder Perspective (Hampson and Kappel)

Frank Kappel - Cherries

Landmarks in the PARC cherry breeding program

- > Stella - self-fertile
- > Summit - larger cherries
- > Lapins- late
- > Sweetheart - later
- > Staccato - even later and a premium cherry

There are many varieties introduced. Few are successful. Breeding is:

- Long-term process (20 years from cross to naming)
- Every variety has its challenges (storage, handling, taste), there is no perfect variety
- Limited number of trees at early stages of breeding program (1 tree -> 4 trees -> etc.); need to address a lot of requirements and to spread the area of concentration.

Industry Responsibility:

- Test selections
- Need for champions.

The late material is easy to get testers. The other material that is languishing (e.g. SPC 136 is similar in timing to Van and Bing but appears, from PARC testing, to be better than either of these cherries).

It is no longer acceptable to have the variety named and trust the nurseries to flog the new varieties in the marketplace.

Cheryl Hampson - Apple Breeder

While similar in many ways, apples and pears are sold by variety name as distinct commodities. Unlike cherries, there is no advantage to early or late harvests.

A good example of a failed introduction is 'Silken'. 8S6923 and SPA440 are outstanding new selections. Other breeders of tree fruits in Canada (pear, apple, peach) have similar concerns about the lack of a focused introduction of new varieties. The current process of licensing to nurseries has not produced the desired results in terms of market awareness. Lack of funding for launching a new variety is seen as an important barrier to cultivar success by all these breeders. One suggestion is a “request for proposals” process, in which applicants who wish to be the commercialization agents would explain their proposed marketing strategy as part of the application. Maybe nurseries are not the best choice for a commercialization agent.

Breeding programs have made increased use of sensory evaluation both within PARC and with consumers. Harvest indices have been developed but are obviously not being well communicated to the growers who plant the new varieties. CA storage parameters require the availability of larger quantities of fruit.

Funding

BC Tree Fruits probably spends more on promotion than any other group in the region. It is based upon \$0.35 per carton for promotion. They have been cooperative in working with the NVDC in promoting Ambrosia, but restrictions are in place by variety where that money is spent (no cross-pooling).

Industry Levy Funding - Gord Shandler, NVDC

The NVDC operates under a provincial Act, which allows industry to levy funds from themselves, both from organic and conventional growers. BCTF is the principal marketer. Various approaches have been taken to marketing. The marketing plan could not have been done solely with the levy initially, the matching funding from TFIDF and IAF was critical. Collection of levies can only be at the point of sale and should be addressed early in the process. They are trying to collect from every grower but are not 100% successful. Enforcement is difficult.

Criticism was directed at PICO that not all parties were being forced to pay the levies. This is beyond the ability of PICO to enforce because they sold the tree and there is no requirement to pay such a levy. The PICO Board has decided to not share the list of growers who have Ambrosia.

Note: This is a critical element that can be made to work in Canada as well. There are differences in laws between Canada and the US.

Tree Fruit Industry Development Fund - Dave Hobson

The TFIDF was established by BC in 2000 with funds for various commodity groups. Represents \$2,000,000 and will result in approximately \$170,000 of funding being available per year (subject to investment returns).

Eligible projects must benefit the industry as a whole, and the info that results from the project must be made public. Fifty percent cost sharing is the maximum. The applications so far have been from NVDC, BC Tree Fruits, BCFGGA, but individuals may also be eligible if they meet the above criteria. Some funding remains available for 2003 and more for 2004. The \$ 0.35/box from BCTF can be matched (if incremental to normal marketing efforts) by TFIDF and both can be matched by IAF. The NVDC could be a body for organizing a project around a "template" for new variety development that could be utilized for successive variety introductions. Contact Glen Lucas at BCFGGA for applications.

CAFI - Phil Bergen, AAFC

The Canadian Agriculture and Food International Program supports the Agricultural Policy Framework. Eligible projects must link with Ag Policy Framework of AAFC, and center on facilitating export trade. AAFC in New Westminster (formerly Market Industry Services Branch) provides market information, but it is generic by commodity. They also provide info on regulatory issues, promotional events in other countries. The target of CAFI is small to medium sized companies, especially value-added products. The CAFI fund is not really new, but an enhancement of two previous international programs, one for generic product promotion by national commodity organizations (e.g. pork) and the other for ad hoc projects. CAFI accepts applications quarterly. Note that "branding" as used in CAFI literature refers not to a particular company's brand but to the image of Canada as a purveyor of high quality, safe food grown under environmentally sound production methods. CAFI funds must also be matched i.e. you provide half. Gap exists for domestic marketing. It is critical to ensure that you are ready to supply and go to the market, and that you are able to deal with your domestic market first. Difficulties exist in commodity groups working together across Canada.

It was pointed out by one of the participants that in the rest of the world, there is government funding to support the introduction of cultivars from their national breeding programs. Though there is funding that may be directed to international marketing, there is no funding to introduce varieties domestically in Canada.

Investment Agriculture Foundation

John Schildroth is the Executive Director of the "non-government" Investment Agriculture Foundation and the provincial government Director of the Industry Competitiveness Branch. The Branch has worked with the establishment of the NVDC, Tree Fruit Development Fund, Intellectual Property matters, Industry specialists. The provincial government has no money for funding research or other activities.

IAF manages the replant program, funded "Growing with Care" Program.

John Schildroth

John remarked that the group is highly innovative (finding new pools of profit) and an industry cannot succeed without being innovative. Do not chase government programs unless they can contribute to your plan. Also heard:

- Need for a strategy and structure based upon the introduction of new varieties;
- Communication and promotion and cooperation; and
- Funding to spread the risk.

Noted that the beef industry funnels all their money through one pool so that the government will match the whole industry contribution.

Nutraceutical industry, greenhouse industry and organics have some similarities and whose plans can be considered. Government money always has "strings" and may not be that helpful.

APF may be able to contribute to bringing value chains closer together. The CARD councils (IAF in BC) will also be provided some funding to work with value chains.

Al Oliver

IAF is trying to help industries to adapt, diversify and grow. The discussions today would seem to fit. Share the risk in the early stages of development. Does not fund the core activities of established companies or entities. Testing and technical challenges may be considered favourably. IAF is happiest dealing with the public good. 50/50 funding is the norm.

Process is simply to apply for an application on-line (www.iafbc.ca). Al can help with applications.

Could the cost of planting new varieties be considered as a contribution? May be possible, but they do not match in-kind contributions. May go higher than the 50% on projects where the benefits are widespread and significant.

Potential for a portion of tree royalties to go to promotion (increase the per tree sale price to kick start the promotion). Domestic marketing is a problem but there may be a need to change the rules. Possible to fund portions of a project if not all is eligible.

Problem is the need to build consensus in the industry. Canadian Hort Council (apple working group) would have a stronger voice in attempting to address the need for changes in governmental programs.

Suggested Terms of Reference for Strategy

- ❖ Market demand/opportunities (Competitive Intelligence)
 - ❖ Breeding Programs
 - ❖ Testing/Feedback
 - Risk-sharing
 - Information
 - ❖ IP Protection
 - ❖ Selection/Naming
 - ❖ Quality Control/standards
 - ❖ Introduction
 - Development of consumer demand
 - Creation of producer supply
 - ❖ Technical Issues (picking, packing, shipping, storage)
 - ❖ For each of the above, who is involved, what needs to be done, when, where, how, funding? How do we build co-operation?
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Attendees:

Lorraine Bennest (grower), Phil Bergen (AAFC New Westminster), James Calissi (Okanagan Plant Improvement Company [PICO]), Jim Campbell (BCMAFF), George Chadburn (grower), Christine Coletta (marketing consultant), Bruce Currie (grower), Sandy Emmond (PICO), Fred Gartrell (grower and Investment Agriculture Foundation [IAF] board member), Ken Haddrell (PICO), Cheryl Hampson (AAFC Summerland, breeder), Dave Hobson (grower and Tree Fruit Industry Development Fund [TFIDF] Chair), Russell Husch (grower and Chair of the Board of Directors of PICO), Frank Kappel (AAFC Summerland, breeder), Christine Koch (BCMAFF), Joe Lucich (grower), Bob McCoubrey (IAF board member), Sally Mennell (grower), Wilf Mennell (grower), Al Oliver (IAF), Murray Roney (AAFC Summerland, Commercialization Officer), John Schildroth (BCMAFF Director of Industry Competitiveness Branch, and Executive Director of IAF), Gord Shandler (grower and member of New Varieties Development Council [NVDC]), Ron Vollo (grower and Chairman of NVDC).