

Organic Cider Project

Marketplace Research Report

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Introduction

This report is one component of a study to address the potential for producing an Organic cider from cull apples. This section of the report looks at perceived demand in the marketplace, an analysis of competitors, options for distribution and what is required to achieve a license to produce cider.

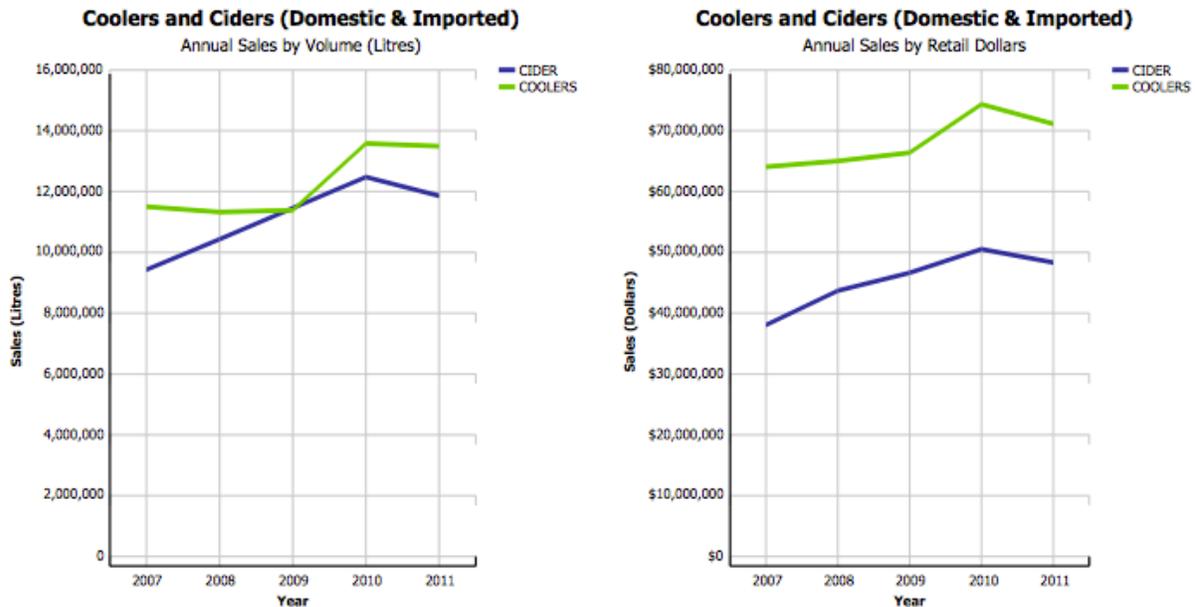
Marketplace Demand

To look at demand amongst the market for organic cider, two methodologies were used. First was a look at available statistics showing cider sales trends in British Columbia. The second method involved a survey of those connected to the alcohol trade.

Sales Statistics in BC

The following statistics are taken from the BC Liquor Distribution Branch Quarterly Market Review from March 2011.

Cider sales in BC have increased from 9,508,755 litres to nearly 12 million litres between 2007 and March 2011, but were stagnant at that level from 2009 to 2011. Dollar sales increased from \$38.4 million to \$48.7 million over the same period (Source BCLDB Quarterly report March 2011 – p26).



In spite of sales being stagnant for cider overall, there is strong growth in the Domestic Draft category where sales have increased by strong percentages over the past three years (see table below).

Table - BCLDB Cider Market - Sales in Litres (period ending March 2011)

	2007	2008	2009	2010	2011
Domestic Draft	32,725	33,976	45,555	76,848	90,445
% Change vs. Previous Yr		3.8%	34.1%	68.7%	17.7%
Domestic Packaged	8,786,312	9,299,649	9,729,988	10,494,429	9,873,621
% Change vs. Previous Yr		5.8%	4.6%	7.9%	-5.9%
Domestic Other	16,674	32,714	19,120	28,121	30,428
% Change vs. Previous Yr		96.2%	-41.6%	47.1%	8.2%
DOMESTIC TOTAL	8,835,711	9,366,339	9,794,663	10,599,398	9,994,494
% Change vs. Previous Yr		6.0%	4.6%	8.2%	-5.7%
Import Draft	266,600	393,100	426,650	406,100	361,150
% Change vs. Previous Yr		47.4%	8.5%	-4.8%	-11.1%
Import Packaged	406,444	752,749	1,314,356	1,551,732	1,582,125
% Change vs. Previous Yr		85.2%	74.6%	18.1%	2.0%
IMPORT TOTAL	673,044	1,145,849	1,741,006	1,957,832	1,943,275
% Change vs. Previous Yr		70.2%	51.9%	12.5%	-0.7%
TOTAL	9,508,755	10,512,188	11,535,669	12,557,230	11,937,769
% Change vs. Previous Yr		10.6%	9.7%	8.9%	-4.9%

In terms of retail dollar sales, domestic draft cider also shows the strongest growth. Domestic packaged cider has remained fairly stagnant over the past four years. While a relatively small portion of the cider market it would appear that there is good growth potential in domestic draft and that this channel may suit the production of small amounts of high quality organic cider.

Table - BCLDB Cider Market - Retail Sales in Dollars (000s) (period ending March 2011)

	2007	2008	2009	2010	2011
Domestic Draft	\$125	\$118	\$176	\$292	\$354
% Change vs. Previous Yr		-5.6%	49.2%	65.9%	21.2%
Domestic Packaged	\$34,551	\$37,461	\$37,738	\$39,683	\$37,916
% Change vs. Previous Yr		8.4%	0.7%	5.2%	-4.5%
Domestic Other	\$401	\$630	\$482	\$610	\$579
% Change vs. Previous Yr		57.1%	-23.5%	26.6%	-5.1%
DOMESTIC TOTAL	\$35,077	\$38,209	\$38,396	\$40,585	\$38,849
% Change vs. Previous Yr		8.9%	0.5%	5.7%	-4.3%
Import Draft	\$1,156	\$1,754	\$1,909	\$1,972	\$1,643
% Change vs. Previous Yr		51.7%	8.8%	3.3%	-16.7%
Import Packaged	\$2,215	\$4,129	\$6,727	\$8,369	\$8,234
% Change vs. Previous Yr		86.4%	62.9%	24.4%	-1.6%
IMPORT TOTAL	\$3,371	\$5,883	\$8,636	\$10,341	\$9,877
% Change vs. Previous Yr		74.5%	46.8%	19.7%	-4.5%
TOTAL	\$38,448	\$44,092	\$47,032	\$50,926	\$48,726
% Change vs. Previous Yr		14.7%	6.7%	8.3%	-4.3%

Marketplace Demand Survey

In addition to looking at current sales statistics for cider, a brief Marketplace Demand Survey was conducted on-line to get a sense from those in the industry about the general feeling for cider in the marketplace.

The sample group targeted for the survey were contacts working in the industry in retail, restaurants, sales, pubs as well as some interested cider consumers. The sample base was targeted through the email list of Wine Plus+ (the author of the Marketplace Research portion of this report) and via social media such as twitter and facebook.

There were 55 responses to the survey. The survey questions and the results are shown below. There is also a section on Comments from the Marketplace Study with some interesting feedback from participants. While not a large sample size, the people completing the survey are those involved in the day to day sales and purchase of alcoholic beverages and provide an important qualitative look at the potential for an Organic Cider.

Survey Questions

The survey was not designed to be an in-depth marketplace study but to get a sense of the interest in organic cider products in this market. The survey was designed to be quick to fill in to encourage responses. A copy of the survey is shown below:

INTRODUCTION:

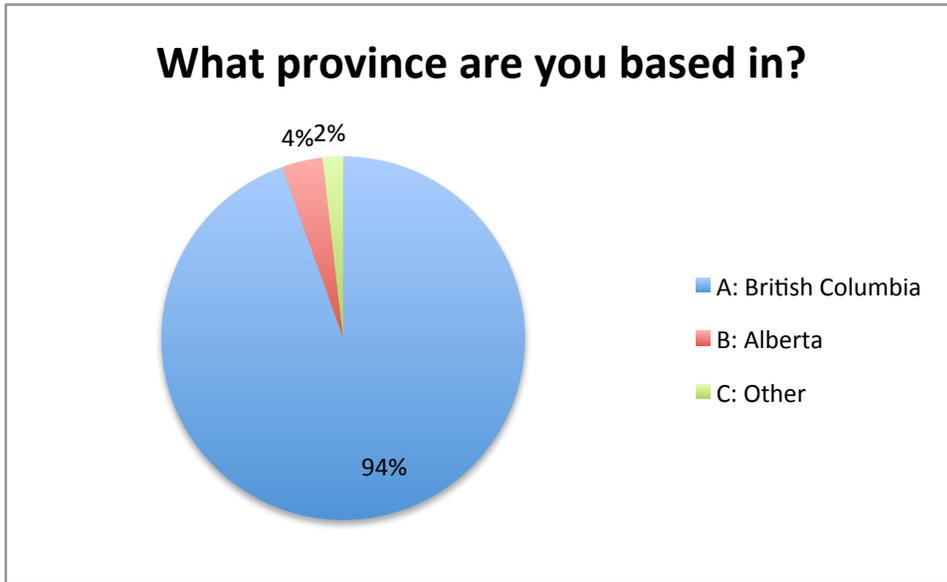
This brief survey is to help determine the interest for cider products in British Columbia and Alberta as part of research into the potential for a new BC produced organic cider. The survey will take less than five minutes to complete. We appreciate your assistance.

QUESTIONS:

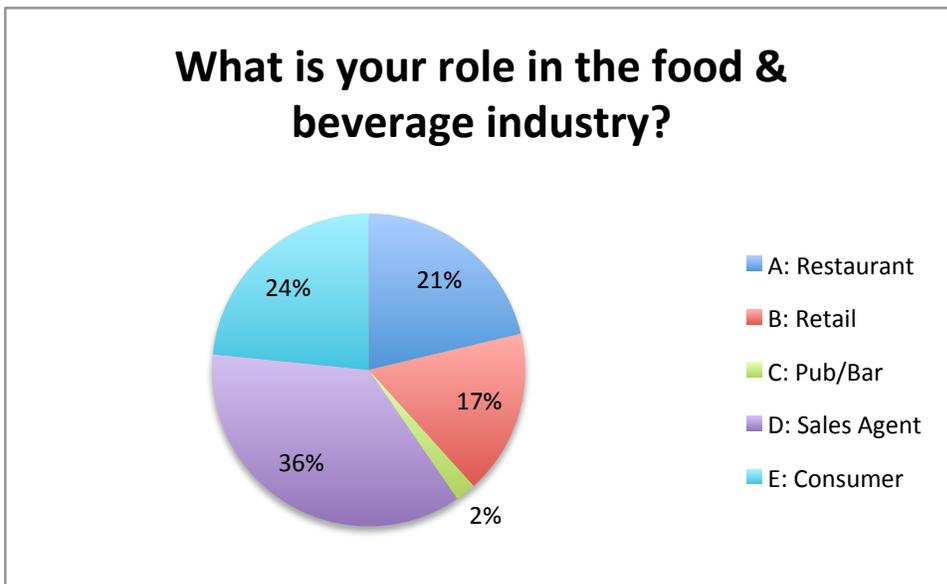
- 1) What province are you based in? BC, AB, Other
- 2) What is your role in the food & beverage industry? Restaurant, Retail, Pub, Consumer, Sales, Other
- 3) How strong do you believe the market demand is for cider in your Province? Low, Moderate, Strong, Very Strong
- 4) Is cider becoming more or less popular in recent years? Less, Same, More
- 5) Do you personally drink cider? Yes, No
- 6) If yes, what is your favourite cider?
- 7) Are there any styles of cider you have tried/seen elsewhere that you would like to see available in BC/AB?
- 8) Do you know of any organic ciders available in your Province? Yes, No (if Yes, which one?)
- 9) What do you think the demand would be for a BC produced organic cider? Low, Moderate, Strong, Very Strong
- 10) What style of BC organic cider would you like to see? Dry, Medium sweetness, Sweet, All styles
- 11) What age group in your experience buys the most cider? 19-24, 25-34, 35-44, 45-54, 55+
- 12) What challenges do you see to the introduction of a new BC organic cider into the marketplace?
- 13) Any other comments on the potential for a new BC organic cider?

Results

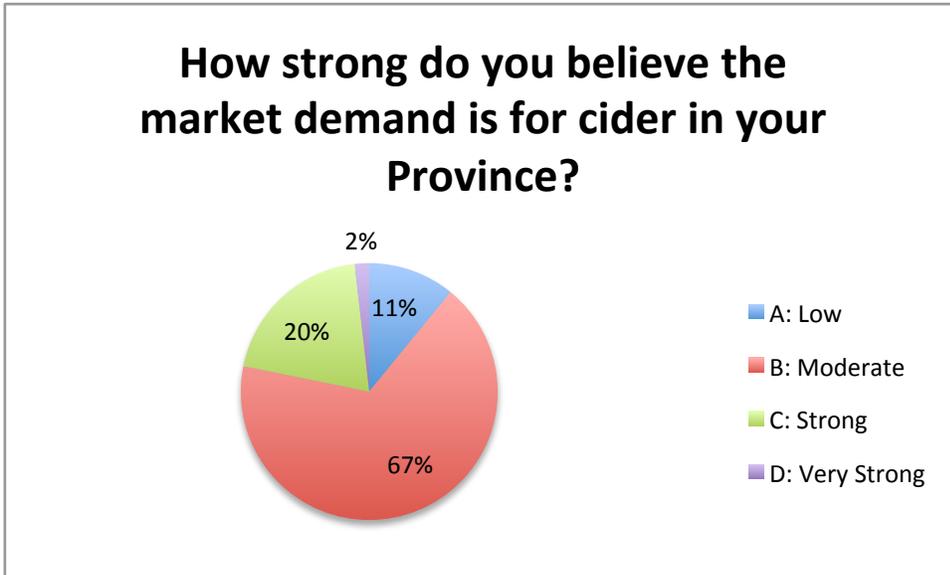
The majority of the respondents were based in British Columbia.



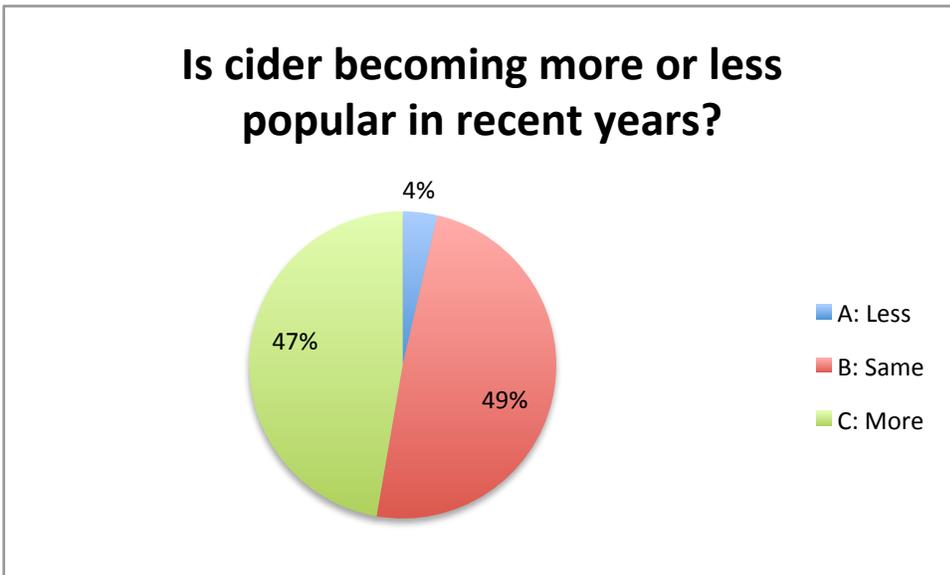
The survey sample was made up of an even mix of the different sectors of the market giving a good cross section of different opinions.



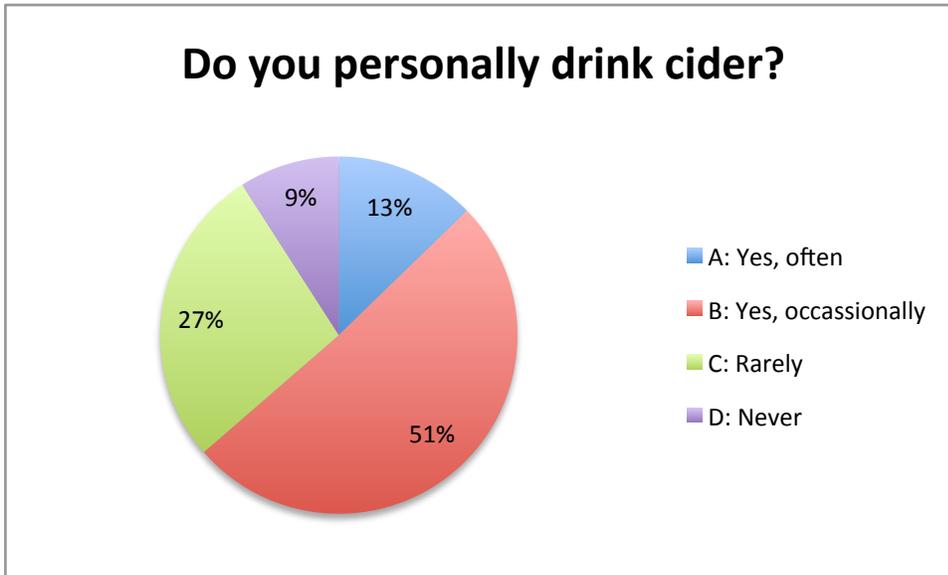
There is general consensus that there is "moderate" demand only for cider selected by 67%. A further 20% did see "strong demand" for cider showing some potential.



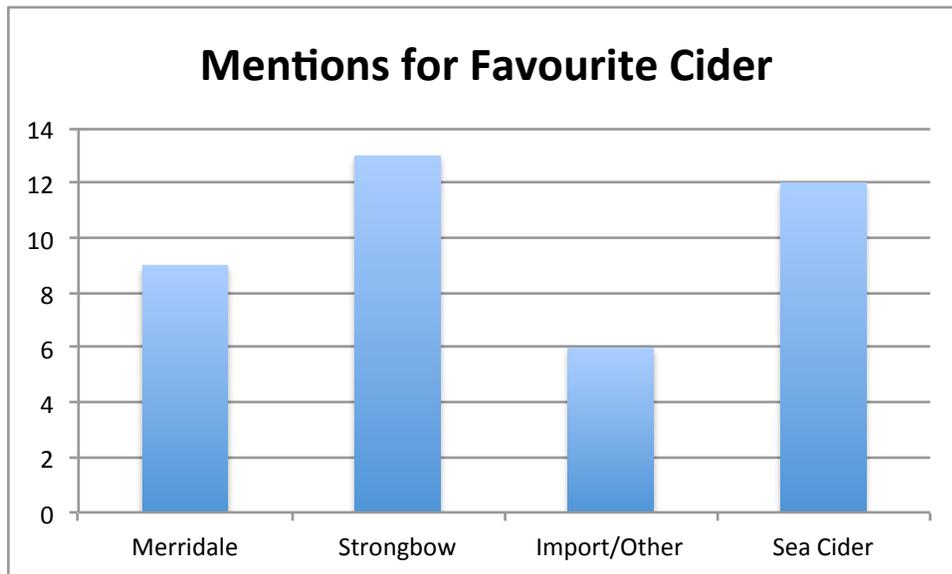
However, there is some potential as 47% believed that cider is becoming more popular and only 4% thought it was becoming less popular.



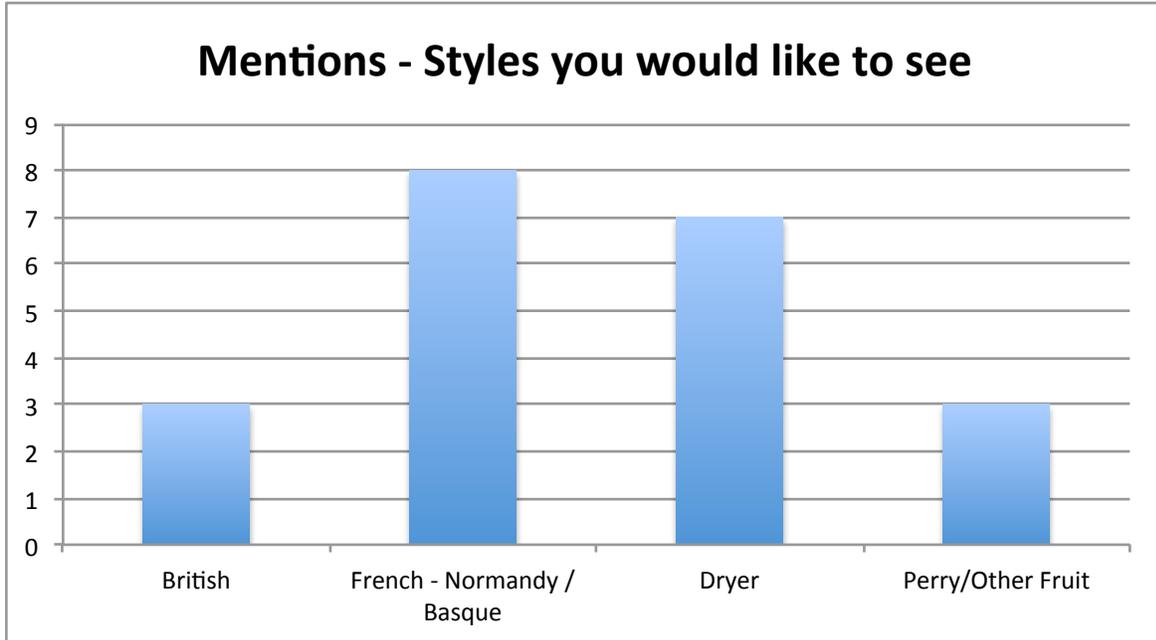
Of the sample, approximately 50% were occasional cider drinkers, 13% consume it often and 27% rarely. 9% never consume cider.



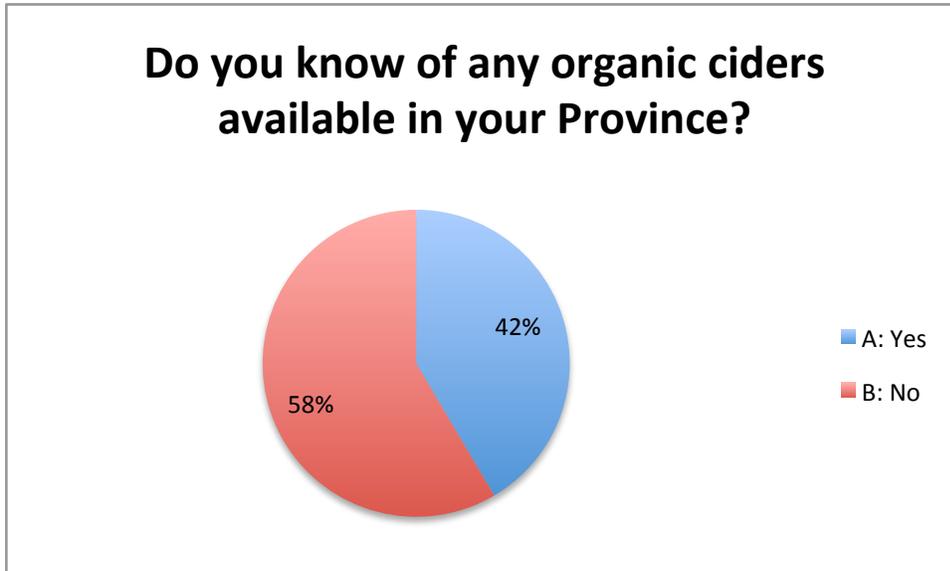
Those who drink cider were asked what their favourite cider is. The table below shows the number of mentions for the various brands and is quite clearly divided between three main brands. These are all considered more specialty ciders showing that these are clearly associated with quality.



Respondents were also asked what cider styles they would like to see available. There was strong support for the European (British, Normandy, Brittany, Basque) cider styles and a number of unprompted mentions for drier styles.



Almost half the respondents believed they new of an organic cider available in their market but when asked which organic ciders they were aware of, many answered a brand that does not actually produce organic cider (such as Merridale).

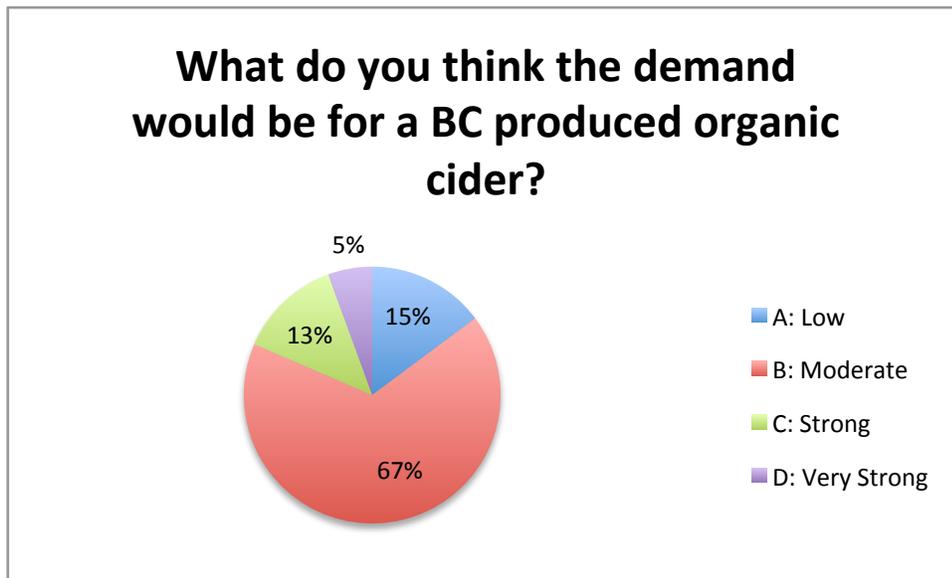


The following ciders were listed by respondents as believed to be organic with the majority of mentions for Merridale and Sea Cider even though Merridale is not organic.

- East Kelowna Cider Company
- Merridale
- Mill Street

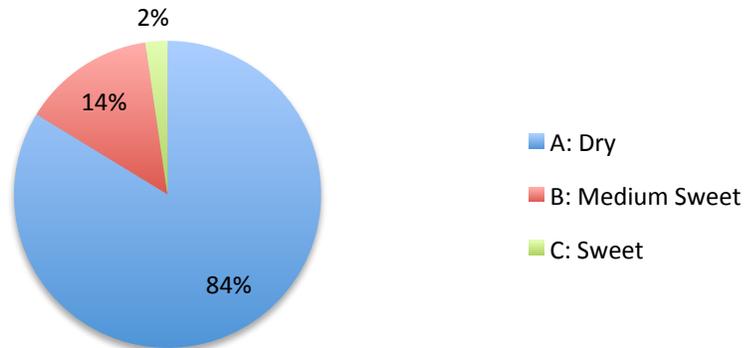
- Raven Ridge
- Orchard Hill Cidery Red Roof
- Samuel Smith
- Sea Cider
- Sir Perry
- Westons

An important question of the study was the perceived demand for a BC produced organic cider. Two-thirds (67%) believed there would be “moderate” demand, 13% “strong” demand and 5% “very strong” demand. Only 15% thought there would be “low” demand.



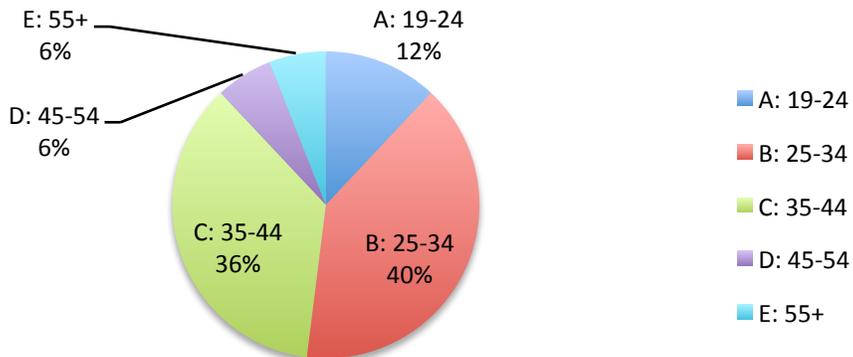
There was an overwhelming response that the style of cider respondents would like to see is a “dry” style with 84% of respondents agreeing. This shows that there may be opportunity for a drier style of cider to form a niche position in the market.

What style of BC organic cider would you like to see?



There were mixed results as to the perceived biggest purchasing age group of cider with the 25-34 (40%) and the 35-44 (36%) forming the perceived key market by respondents.

What age group in your experience buys the most cider?



Two questions at the end of the survey were open-ended to attain respondents opinions on organic cider in a more qualitative way. The responses are included in the sections below.

These open-ended results will provide valuable thoughts for potential cider producers to consider when making, launching and marketing their product.

Challenges to the Introduction of a new BC Organic Cider

The open-ended question of “What challenges do you see to the introduction of a new BC organic cider into the marketplace?” saw the following responses. These are unedited and placed in alphabetical order.

- Association in BC of cider being a sweet, unserious alco-pop.
- Competing with beer drinkers.
- Competition from fizz-pop ciders.
- Consumer awareness. My best suggestion would be to make sure you have a good importer and one who focuses on organic products. (I'm in Wine Media and happy to connect you).
- Convincing people of quality and removing opposition to cider due to products like Growers/Okanagan and such.
- Cost of production and promotion.
- Crowded drinks market.
- Declining age group.
- Dedication to doing it right and the willingness to be innovative.
- Educating the public on what cider is.
- Establishing themselves as a quality producer if they are aiming at a drier, more english style or having very fancy labels & marketing if they are going for a younger audience and sweeter style.
- Exposure and gaining presence. Marketing would need a important part of the business plan.
- Getting a listing with the BCLDB.
- Getting the older crowd into trying the product.
- I'm not really that sure but I have the impression cider is a small market share for adult beverages and that's hard to make a big splash in a small pond.
- It may be too expensive.
- It will be hard, but there are so many new ciders out there that you would have to make this one stand alone. They are just becoming popular, and ones like Strongbow are causing the awareness that cider doesn't always have to taste the same or be sweet. Working in the retail side of things I didn't sell too many ciders and we had ones sit on the shelf for long periods of time, mainly the local BC ones. I would be more than happy to help with any other questions.
- Lack of local (Alberta) historic appreciation of this style of alcoholic beverage.
- Liquor board acceptance.
- Main obstacle would be that there just isn't THAT MUCH demand for cider.
- Marketing.
- Metrovino (in Calgary) sells (a combination of 2 imported Normandy ciders and a range of Jodoin cidres from Quebec) about 30-50 cases per annum of quality cider. Changes to the market tastes will only be effected by the presence of a quality BC cider that emulates the success of the Quebecois cidres or even the micro-brew beers where the reality as well of the impression of the product is quality and cool...
- Must keep prices reasonable and quality high. Most artisan ciders are put of reach price wise for restaurants as they get into wine price zones when perhaps they should be closer to beer prices from a consumer perspective.
- Not enough demand for traditional cider. Tough to compete with strength of Strongbow in the marketplace.
- Organic implies premium, premium implies expensive, expensive ciders won't sell.

- Placement as an alternative to beer. For men, seen as a more femine drink in Canada. In women, there are heavy competition for their favor.
- Price and packaging.
- Price is a challenge.
- Price point and competition against the established, mass produced cidre.
- Price point... everyone seems to drink strongbow, keep it cheaper than their product and produce a dry cider focusing on local produce. I'm sure if you made a honeycrisp apple cider everyone would flock! Those apples sell out at some markets in 2 weeks.
- Price resistance; confusion with commercial, sweet cider.
- Price, small market, storage issue.
- Pricepoint and availability. Competing with the generic ciders out there (Growers etc...).
- Pricing and 'look' of the product.
- Pricing/marketing dollars.
- Proper marketing. It should be marketed like a microbrew, an upscale product and a local product. The challenge will be to convince the BC consumer that not all cider is the mass produced, sweet, fizzy, pop-style cider they are used to.

Comments from Market Study

The final question of the survey was an open-ended question asking “Do you have any other comments on the potential for a new BC organic cider?” The goal of this question was to open up any other potential issues or ideas for the project. The unedited comments are listed below.

- A product I would like to see, good luck with the project! Too bad I will not be able to stock your product at a VQA wine store. Mark Wright, Manager.
- Do it!
- Enlist the BC bartender/cocktail scene to help promote a better quality cider by having them use it in their drinks.
- Excited to see this come to fruition (no pun intended). Feel free to contact me at the address below if you have more questions from a potential BC organic cider consumer.
- Focus on location or farm name\orchard, etc...instead of organic.
- French Normandy or Brittany cider.
- From rhys it would sell, have to tie in name with brand, get the community behind organic made cider.
- Giver!!
- Go for it!
- go for it!
- Good luck in the endeavour.
- Good luck with your new adventure.
- Great idea - much needed in the market.
- I am always for local products and supporting everything local, but it's a hard sell sometimes. You would need to get out there getting people to try it and have a good price point, maybe have it available in plastic packaging and/or something different from what all the others offer. Something that is easy to take camping or boating. I find most of the local ones don't have much advertising, and many consumers may assume they are.

- I believe cider is on the rise due to the fact that it is gluten free and of course delicious! Many of my friends are either celiac, gluten intolerant or just trying to keep their gluten intake to a minimum. Which makes cider their go to beverage when looking for something bubbly and refreshing.
- I don't drink much cider (organic or otherwise) but nonetheless would be interested to try it if it were in a dry or almost-dry style. I would suggest they give food pairing ideas on the labels and hopefully some classic and new recipe ideas on their website.
- I hope it happens with an easy to open bottle and a lighter taste.
- I like the idea of varietally labelled ciders. If you develop a killer brand you should let me sell it for you ;)
- I love to see more local and more organic beverages, and I hope we see some in Alberta.
- I personally am always looking for organic beers, wines, and other non-sweet beverages, so an organic cider would be great. I am not of the 'cooler' crowd of beverage buyers, but maybe they are the best market for an organic cider, I don't know.
- I would love to see a BC draft cider on tap in local bars.
- I'm ready for some!
- It's lighter than beer and if marketed probably, could be seen and a solid alternative the way it is in the UK. One small niche I've seen recently are guys who can't digest wheat (celiacs), have been moving over to cider from beer.
- Lonetree from Whistler Brewing is taking off.
- "Make it funky great label, champagne or Grolsh flip top, organic, French apples, show how it goes with food. Thanks for your support." *John Clerides, Marquis Wine Cellars* .
- Rock Creek from Big Rock has been doing well.
- Strong Bow does well. All of these suggest there is a good market for drier ciders."
- Make sure the packaging is nice.
- Make sure the cider has lots of terroir and character.
- Most women are an easy sell for ciders....men is a lot harder sell.
- Please keep us in the wine industry abreast of what you are doing so we can be a part of helping.
- "Previous (and current) BC ciders are more of the RTD category, very little to do with the nature of cider. They are industrial, mostly manipulated and often not made of fresh juice, but concentrate from...?"
- A product of quality, presented as a historic and yet, contemporary, alternative to craft beers is still needed."
- Priced well it would trigger consumer trial; then it's up to the quality in the bottle and availability of the product around the province.
- There is a market for it through promotion and lot of education.
- There's room.
- Think there is room for more. Packaging (including bottle size format) and price point extremely important. 4 pack 500ml bottles preferred rather than 750ml or 6 pack cans. Price needs to come in under \$15 (at LRS shelf price i.e. list +20%).
- You can't put HFCS in organic stuff can you? I can't believe people suck back Strongbow with no idea that it's loaded with that crap.

Competitive Analysis

An analysis of the British Columbia market found the following locally produced ciders available (see table below). There is great diversity in style, sweetness and price reflecting a varied market. This would suggest that there is potential for different styles to be accepted into the marketplace.

The cider market could almost be broken down into two categories, the mass market, sweeter style of cider dominated by the big brands and then more artisanal small production, often producing drier styles of cider that appeal to a smaller niche market.

Producer	Size (ml)	Price	Origin	Alcohol
Big Rock - Rock Creek Cider	6 x 355ml	9.99	Canada	5.5
Big Rock - Rock Creek Cider	6 x 341ml	9.99	Canada	5.5
Extra - Hard Glacier Berry, Mango	6 x 330ml	9.95	Canada	7
Extra - Hard Glacier Berry, Raspberry	2 L	8.69	Canada	7
Growers 1927 Cider	4 x 473 ml	10.99	Canada	5.5
Growers Cider - Apple Cinnamon	1 L	4.99	Canada	7
Growers Cider - Apple Lime, Blueberry, Extra Dry Apple, Granny Smith, Peach, Nectarine, Passion Fruit, Pear, Pomegranite, Raspberry, Ruby Red Grapefruit, White Cranberry	6 x 341ml	9.49	Canada	7
Growers Cider - Cranberry, Extra Dry Apple, Peach, Orchard Berry, Pomegranite, Raspberry, Ruby Red Grapefruit	2 L	7.99	Canada	7
Growers Cider - Extra Dry 12-pack	12 x 341ml	18.99	Canada	7
Okanagan Premium - Black Cherry, Crisp Apple, Harvest Pear, Peach, White Grape	6 x 341ml	9.49	Canada	7
Okanagan Premium - Crisp Apple, Harvest Pear, Peach	2 L	7.99	Canada	7
Okanagan Premium - Peach	8 x 341ml	10.95	Canada	7
Merridale Ciderworks - Apple Oh de Vie	375 ml		Canada, Cobble Hill, BC	40
Merridale Ciderworks - Blackberry Oh de Vie			Canada, Cobble Hill, BC	40
Merridale Ciderworks - Cidre Normandie	750 ml	16.99	Canada, Cobble Hill, BC	12.5
Merridale Ciderworks - Cyser	341 ml	6.99	Canada, Cobble Hill, BC	11
Merridale Ciderworks - House Cider	1 L	9.99	Canada, Cobble Hill, BC	6
Merridale Ciderworks - Merri Berri	341 ml	5.99	Canada, Cobble Hill, BC	6
Merridale Ciderworks - Merri Berri	1 L	9.99	Canada, Cobble Hill, BC	6
Merridale Ciderworks - Mure Oh!	375 ml		Canada, Cobble Hill, BC	19
Merridale Ciderworks - Pomme Oh!	375 ml		Canada, Cobble Hill, BC	19
Merridale Ciderworks - Scrumpt	341 ml	6.99	Canada, Cobble Hill, BC	11
Merridale Ciderworks - Somerset	750ml		Canada, Cobble Hill, BC	8
Merridale Ciderworks - Traditional Cider	341 ml	4.99	Canada, Cobble Hill, BC	7
Merridale Ciderworks - Traditional Cider	1 L	10.99	Canada, Cobble Hill, BC	7
Merridale Ciderworks - Winter Apple	375 ml		Canada, Cobble Hill, BC	10
East Kelowna Cider Company - Ross Hard Apple Cider		12.7	Canada, Okanagan, BC	6
East Kelowna Cider Company - Ross Logger Cider			Canada, Okanagan, BC	
East Kelowna Cider Company - Ross Soft Cider			Canada, Okanagan, BC	
East Kelowna Cider Company - Ross Winter Burn			Canada, Okanagan, BC	
East Kelowna Cider Company - Ross Winter Gold			Canada, Okanagan, BC	
Raven Ridge Cidery - True Sparkling Cider	750 ml	27.95	Canada, Okanagan, BC	7
Orchard Hill Cidery - Red Roof Apple Cider	4 x 355 ml	13.99	Canada, Oliver, BC	7
Sea Cider Farm - Cyser	750ml	25	Canada, Saanichton, BC	16
Sea Cider Farm - Flagship	750ml	15	Canada, Saanichton, BC	6
Sea Cider Farm - Kings & Spies	750ml	15	Canada, Saanichton, BC	8.5
Sea Cider Farm - Pippins	750ml	15	Canada, Saanichton, BC	9.5
Sea Cider Farm - Pommeau	750ml	25	Canada, Saanichton, BC	18
Sea Cider Farm - Pomona	375ml	25	Canada, Saanichton, BC	16
Sea Cider Farm - Rumrunner	750ml	17.5	Canada, Saanichton, BC	12
Sea Cider Farm - Wild English	500ml	12	Canada, Saanichton, BC	7.5

The choice of what cider style to produce will be a major decision for anyone wanting to pursue this project further. From the results of the survey and trends in the market it would seem that to be successful a product should be produced in the drier, more traditional style, priced as reasonably as possible and marketed to a small niche market.

Setting up a License

The process for setting up a license is to apply for a Manufacturer's License with the Ministry of Public Safety and Solicitor General. The provincial government has very comprehensive information on the steps necessary to take to get a manufacturer's license for the production of cider (or spirits, wine and beer). This information can be found at <http://www.pssg.gov.bc.ca/lclb/apply/manufacturer/index.htm>.

Some of the highlights of the necessary steps include:

- Business plan with financial statements for three years
- The need for an Agents License to market and promote products off-site
- Age at least 19 years of age and resident of BC, Canadian citizen or permanent resident
- Consent to a criminal record search
- Not be associated with an establishment holding a liquor license (e.g. bar, restaurant)
- Must have equipment and facilities adequate for producing at least 4500 litres per year
- Need a Federal Excise Tax license and tax number
- Review of proposed floor plans by local fire/building authorities
- Application fees are \$550 for a distillery or brewery
- Annual license fees range from \$550 to \$1540

The steps are laid out quite clearly on the Ministry of Public Safety and Solicitor General website above.

Distribution Channels

The research looked at the costs to sell through British Columbia and Alberta distribution channels. The BC system is quite complicated. The Alberta system is quite simple. The various costs are outlined below.

Liquor Mark-up in British Columbia

Calculating the price of alcohol in BC is very complex with many different mark-ups and taxes applied depending on where the alcohol is sold. The main mark-ups that contribute to the price are shown below.

The mark-up schedule in BC for ciders, effective Jan 30, 2011 is as follows:

	Volume Markup (\$ per litre)	Percentage Markup (Applied to Landed Cost + Vol. Markup)	Cost of Service Differential (\$ per litre)
BC Packaged	\$0.06	103%	-
Other Packaged	\$0.06	103%	\$0.05
Draught	\$0.06	79%	-

The display price of low alcohol products with an alcohol level of 4.0% by volume or less will be discounted as follows:

CIDER, COOLERS

1.1% to 3.0%: \$1.00/dozen (Approximating 4.0 Litres)

3.1% to 4.0%: \$0.50/dozen (Approximating 4.0 Litres)

To qualify for the above discounts, the cost of the light brand cannot exceed the cost of the "namesake" or comparable regular alcohol brand (regular priced, regular alcohol, 4.1% by volume or greater). In the event that there is no "namesake" or comparable regular alcohol brand, the display price of the light brand will be determined by calculating a price based on regular markup, and Harmonized Sales Tax as above.

There is a legal minimum price of \$3 per litre and \$2.45 per litre for draft cider. The minimum markup is \$1.27 per litre or \$0.89 per litre for draught cider (unless qualifying as a low alcohol product as per above).

There is also a Container Recycling Fee.

Container Type	Container Recycling Fee
Beer, Cider, Cooler Non-Refillable Glass <= 1 Litre	\$0.11
Beer, Cider, Cooler Non-Refillable Glass > 1 Litre	\$0.11
Beer, Cider, Cooler Refillable Glass <= 1 Litre	\$0.00
Beer, Cider, Cooler Refillable Glass > 1 Litre	\$0.00
Plastic, Tetra Pak, Gable Top <= 1 Litre Plastic	\$0.04
Plastic, Tetra Pak, Gable Top > 1 Litre Plastic	\$0.09
Bag-in-Box > 1 Litre	\$0.00
Cans – All Sizes	\$0.02

Imported ciders are subject to additional costs such as a 3% per litre customs duty, an excise duty of \$0.2950 per litre (<=7.0% alcohol) or \$0.62 per litre (>7.0% to <=13.7% alcohol).

The above costs do not include:

- Domestic Charges – such as warehousing, local freight, advertising, agent margin (typically 10-15% depending on what duties are performed)
- HST – will be included in the display price.

Liquor Discount Factors in BC Distribution Channels

Depending on the channel through which the cider is sold, there is a discount factor that is applied. This discount comes out of the profit margin of the producer.

Customer Type	Discount Factor	HST Factor
Licensee (e.g. Restaurant)	0%	10.714%
Licensee Retail Store	16%	9%
Rural Agency Store	10%	9.643%
Independent Wine Store	30%	7.5%
Duty Free Store	N/A	0%

Because of this situation, the best profit margins are achieved by selling direct from the facility and directly to licensees. Although the highest profit margin, there is more work in individually having to sell to restaurants and individuals rather than having the product appear in a large number of stores from obtaining just one listing with the BC Liquor Distribution Branch. The choice often comes down to volume and small volume production can often be sold entirely through the higher profit margin channels.

Liquor Mark-up in Alberta

Warehouses receive liquor products directly from manufacturers or suppliers. When a warehouse receives a shipment, the suppliers (or their agents) set a price that reflects the cost of the product. The supplier's price includes the actual cost of the product (that is, the manufacturer's cost) plus the cost of insurance, marketing and promotion, transportation to the warehouse, warehousing charges and a profit margin.

The AGLC calculates a wholesale price using the supplier's price then adding federal customs and excise taxes and duties, a recycling fee, a container deposit and the provincial mark-up. Mark-up rates depend on product type and alcohol percentage. They are assigned according to an approved rate schedule that is established by policy and reviewed regularly.

Ciders fall under the following mark-up categories based on the level of alcohol.

Refreshment Beverages – GT 8% & LTE 16% (greater than 8% and less than or equal to 16%)	\$4.05 / litre
Refreshment Beverages – GT 1% & LTE 8% (greater than 1% and less than or equal to 8%)	\$1.35 / litre

Potential Sources of Government Funding

Part of this research also looked at potential sources of funding through government programs. Below are some potential sources of government funding that some operations may qualify for that could help in the development or expansion of an Organic cidery.

AgriProcessing Initiative

The AgriProcessing Initiative (API) is part of the Agricultural Flexibility Fund announced in Budget 2009. The initiative is designed to enhance the competitiveness of the agri-processing sector in Canada. It provides support to existing processing companies for agri-processing projects that involve the adoption of innovative and new-to-company manufacturing technologies and processes that are essential to sustaining and improving the sector's position in today's global marketplace.

<http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1294434150330&lang=eng>

Investment Agriculture Foundation of British Columbia

The Investment Agriculture Foundation strategically invests federal and provincial funds in support of innovative projects to benefit the agri-food industry in British Columbia. Funding is available to help the industry seize new opportunities and deal with emerging issues. The link below also provides further funding opportunities through Agri-Food Futures Fund, Canadian Agricultural Adaptation Program (CAAP) and the Canadian Adaptation and Rural Development Fund (CARD).

<http://www.iafbc.ca/index.htm>

Agricultural Flexibility Fund

The Agricultural Flexibility Fund (AgriFlexibility) is a five year (2009-2014) program to improve the sector's competitiveness and help the sector adapt to pressures through non-business risk-management measures that will reduce costs of production, improve environmental sustainability, promote innovation and respond to market challenges.

However, AgriFlexibility has received an overwhelming response from the provinces, territories and/or industry. As such, they report they will no longer be accepting new proposals at this time.

<http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1277926779921&lang=eng>

Growing Forward Agricultural Policy Framework

Growing Forward is a commitment to Canada's agriculture sector that's focused on achieving results, reflects input from across the sector, and delivers programs that are simple, more effective and tailored to local needs. Governments are investing \$1.3 billion over five years into Growing Forward programs. The funding is cost-shared on a 60:40 basis between the Government of Canada and the provincial and territorial governments.

<http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1200339470715&lang=eng>

Canadian Agricultural Adaptation Program

The Canadian Agricultural Adaptation Program (CAAP) is a five-year (2009-2014), program with the objective of facilitating the agriculture, agri-food, and agri-based products sector's ability to seize opportunities, respond to new and emerging issues and pilot solutions to new and ongoing issues in order to adapt and remain competitive. The objectives are to facilitate the agriculture, agri-food, and agri-based products sector's ability to seize opportunities, respond to new and emerging issues and pilot solutions to new and ongoing issues in order to adapt and remain competitive.

<http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1286477571817&lang=eng>

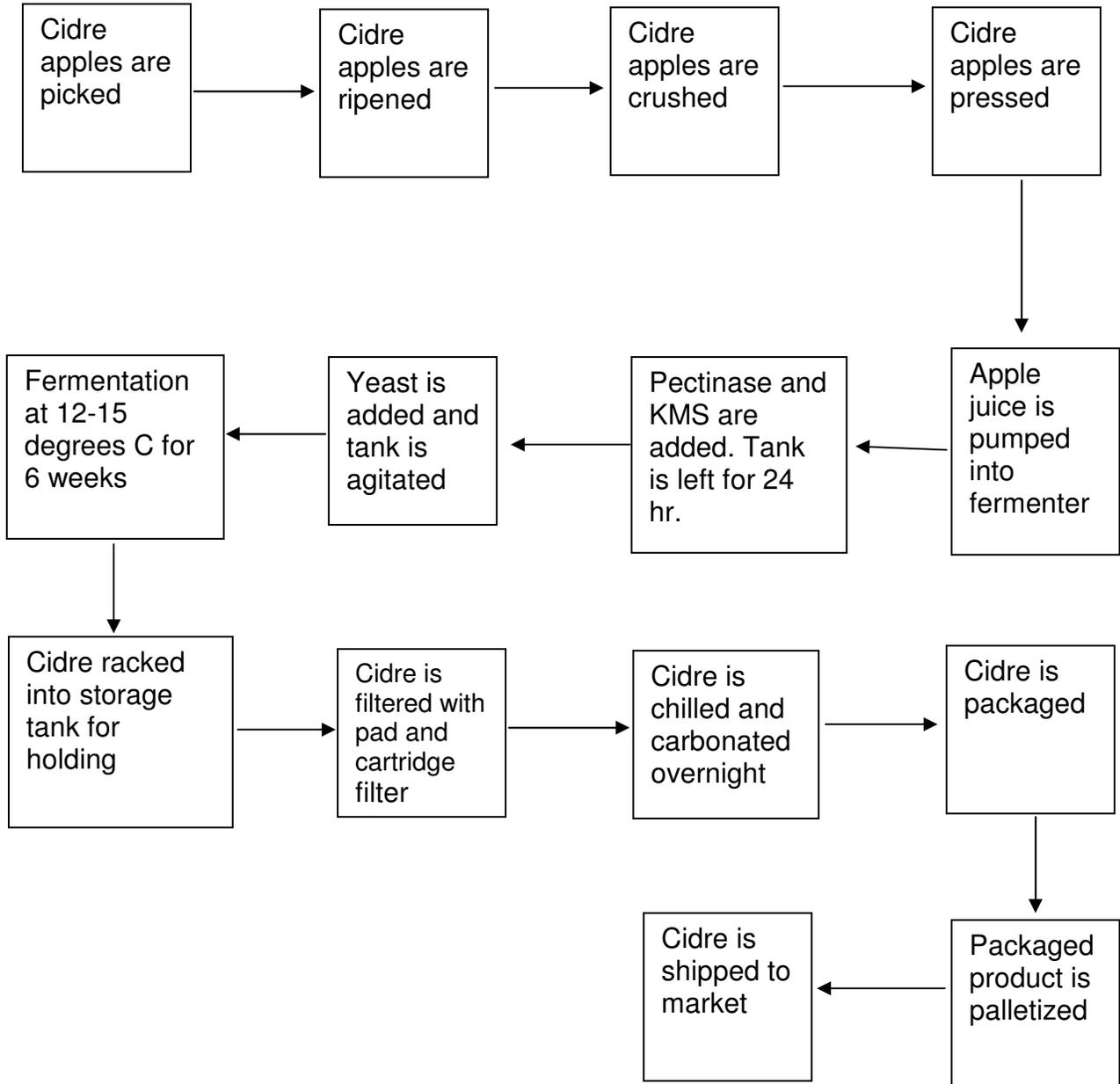
BC Agri-food Sector Climate Action Initiative

There may also be potential opportunity for some producers under the Climate Action Initiative. A link to a document cataloging relevant grants and loans is shown below.

http://www.obwb.ca/fileadmin/docs/catalogue_climate_change_funding_opportunities.pdf

PRODUCTION OF ORGANIC APPLE CIDRE

FLOW DIAGRAM



THE CIDRE PROCESS

The Canadian Organic Regime controls the ingredients that can be added to apple cidre or used as a processing aid in cidre production. The Standard does not impede the process to produce premium apple cidre. Rather the varieties of apples and the handling practices will determine the quality of cidre produced.

The process of cidre production is actually very simple. Use sound ripe apples, keep your facility extremely sanitary and don't "fuss" with the cidre. As you have seen, courses are offered on how to make apple cidre, however, the process can be outlined in the following simple steps:

1. Grind up clean, ripe apples of the chosen variety and press out the juice. You should get about a 68-70% yield (680 – 700 litres per 1000 kg). A bin weighs about 365 kg and should produce about 250 litres.
2. Screen the apple juice if possible, but this is not necessary. Add a pectinase enzyme to aid in clarification later on. Obtain prior approval from your CB about the enzyme. There are acceptable ones available.
3. Add what will end up being 50 ppm sulfur as Potassium metabisulphate to the final batch size. It can be added while pressing or when pressing is finished.
4. Allow the treated juice to sit for 24 hours to inhibit the wild yeast.
5. Add Lalvin EC-1118 yeast according the Scott Laboratories instructions and agitate the tank. The ideal juice temperature is 12-15 degrees Celcius.
6. Agitate the tank at least once per day by drawing from the bottom valve and pumping over the top man way.
7. Once tiny bubbles are visible, stop agitating and focus on keeping the temperature to a maximum of 15 C. The yeast cells are changing from aerobic respiration to anaerobic respiration in which they consume the natural sugars in the juice and produce alcohol.
8. Allow the fermentation to proceed while keeping the temperature low.

9. Monitor the progress of the fermentation by taking small samples and doing hydrometer readings. This will take from 10 days to 6 weeks, but DON'T FUSS WITH IT.
10. If the fermentation looks like it will stop (stuck fermentation), warm the tank and add more yeast. But as long as the sugar continues to decrease every day or two, just leave it.
11. Once the balling is less than 1.0 and all evidence of fermentation is gone, the tank can be racked into a clean sanitized tank. Make sure to get approval from your CB about the cleaners and sanitizers you use. At this time the sulfur should be tested and adjusted to keep a free sulfur around 15 ppm. As long as the tank remains cool, this cidre is stable and will keep for years. Using the sparging stone mounted at the bottom of the tank, sparge carbon dioxide into the tank as it is being racked to fill the headspace with CO₂. This prevents oxidation.
12. Don't touch it for at least a month, or two. It should become clear. Then filter it without the use of filter aids. Use a cellulose based pad filter as allowed in the PSL.
13. If it will not clear, filter aids listed in CGSB 32.311 Table 6.6 can be used to clarify the cidre.
14. Make sure the 800 litre tank, pump, hoses and fittings have been sterilized. When you are ready to package, adjust the free sulfur to less than 30 ppm and make sure the total is less than 100 ppm. Sterile filter 800 litres into the pressure vessel tank that is chilled or can be chilled to 0 degrees C. Annual production of 50,000 litres will require 62.5 days of packaging (3 months) using this method.
15. Once the cidre is at a temperature of 0 degrees C, attach a CO₂ regulator to the tank, set the CO₂ pressure to 15 lb. and circulate the cidre out the bottom valve and into the top of the tank. If possible, leave it overnight.
16. The next day, the cidre is ready for packaging into kegs, cans or bottles.
17. The bottling line equipment is offered in this presentation, however, kegs, keg fillers and keg cleaners are commercially available. A small manual

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Cawston BC

canning line is also available but I have not been able to locate a source of cans.

BUILDING

Insulated sandwich tilt up building made of concrete panels poured on the slab floor with Styrofoam insulation in the middle. The building features a fifty year life span with good temperature control. Some local wineries are using this kind of construction.



Workers framing in a window.

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Cawston BC

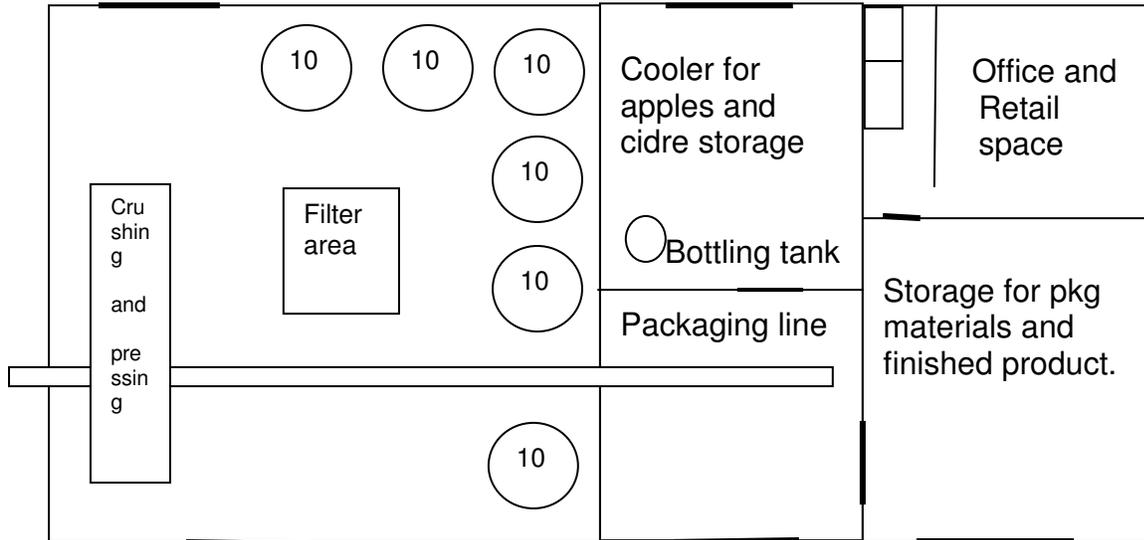


NRI Distribution Inc.
8175 Dallas Drive
Kamloops BC

- built 2009



Basic Plant schematic for the production of Apple cidre



An estimate of the cost of the building 30 ft X 65 ft (2100 sq ft) is \$125/sq ft or about \$244,000. Many prospective cidre makers have a building that can be renovated for much less money. There are many alternate building layouts that would be as functional as the schematic shown above. It is assumed the waste water will be irrigated onto farmland.

**ESTIMATED EQUIPMENT COST TO PRODUCE 500 hL OF APPLES CIDRE
(using 200 bins of apples per year)**

Equipment item	Cost	Freight	Taxes	Installation	Total
Apple Dumper, grinder and belt press	\$25,000	\$800	\$3,000		\$28,800
Transfer pump	\$3,550	\$300	\$426		\$4,276
6 X 10M Litre SS tanks (\$17,000ea)	\$102,000		\$12,240		\$114,240
Cooling jackets for tanks (\$2000 ea)	\$12,000		\$1,440		\$13,440
Hoses and fittings	\$5,000		\$600		\$5,600
Velo 40 X 40 frame filter	\$5,000	\$300	\$600		\$5,900
18 Noryl plates: \$50 each	\$900		\$108		\$1,008
Noryl end plates \$80 each	\$160		\$19		\$179
Cartridge housing for sterile filter	\$3,700		\$444		\$4,144
0.45 micron filter	\$600		\$72		\$672
Pre cartridge 1 micron housing	\$900		\$108		\$1,008
1 micron cartridge	\$100		\$12		\$112
800 L jacketed ss pressure tank "G" series with insulation	\$6,000		\$720		\$6,720
Fittings for tanks (2 butterfly valves ea with triclamps)	\$300		\$36		\$336
50/19L kegs @ \$135	\$6,750		\$810		\$7,560
Hand held counter pressure filler	\$8,695		\$1,043		\$9,738
Semi-automatic crowner	\$1,000		\$120		\$1,120
Pasteurization tunnell (used)	\$28,000	\$1,500	\$3,360		\$32,860
Semi-automatic labeller	\$2,000	\$250	\$240		\$2,490
Hot water boiler	\$4,000		\$480		\$4,480
CO2 regulator	\$120		\$14		\$134
Air compressor	\$750		\$90		\$840
Winus C2-W3 cooler	\$5,480		\$658		\$6,138

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Glycol system for 2 tanks	\$2,500		\$300		\$2,800
Installation and setup				\$10,000	\$10,000
			\$0	Subtotal	\$264,596
Contingencies (6%)					\$15,876
				Total	\$280,471

Supplier contact Information

Equipment	Supplier
Press cloths for a rack press	OESCO, Inc. P.O. Box 540, Route 116, Conway, MA 01341 800-634-5557 413-369-4335 Fax 413-369-4431 info@oescoinc.com https://www.oescoinc.com/html/oesco_today.html
750 US Gallon tanks (2500 Litres)	Pasco Poly 407 River Dock Road Weiser, Idaho 83672 Phone (208) 549-1861 Fax (208) 549-1141 Email: sales@pascopoly.com http://www.pascopoly.com/index.html
VORAN Screen Belt Press EBP 350 c/w washer/elevator/grinder	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466 -capacity up to 300 kg/hour, belt width 350mm, spread 240mm -power required 0.37 kw, voltage your choice , includes frequency inverter
Stainless Steel Fittings	Ripley Stainless Ltd. Phone: 250-494-9310, Fax: 250-494-8878 Email: tanks@ripleystainless.com www.ripleystainless.com
Carbonating stainless steel pressure tank (800 L) "G" series	Ripley Stainless Ltd. Phone: 250-494-9310, Fax: 250-494-8878 Email: tanks@ripleystainless.com www.ripleystainless.com
Manual 4 spout Counter pressure filler	GW Kent 506 S. Huron Ypsilanti, Michigan 48197 Tel: 734-572-1300 Fax: 734-572-0097 Toll-free Tel: 800-333-4288 Toll-free Fax: 800-500-7505 E-mail: info@gwkent.com http://www.gwkent.com/
Pneumatic Crowner	Hubert Oliver, Kelowna, BC Phone: 250-764-2645 Cell: 250-868-7650 Email: hsoliver@shaw.ca
Tunnel Pasturizer	Donald R. Rieschel Vice President E-M: don@machineryandequipment.com Machinery and Equipment Co., Inc. P.O. Box 7632, San Francisco, CA 94120 Telephone: (415) 467-3400 Fax: (415) 467-2639
Hot water boiler	Andrew Sheret, 298 Duncan Avenue West, Penticton BC V2A 7N1 Phone: (250) 493-6754

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Semi automatic labeler	GW Kent 506 S. Huron Ypsilanti, Michigan 48197 Tel: 734-572-1300 Fax: 734-572-0097 Toll-free Tel: 800-333-4288 Toll-free Fax: 800-500-7505 E-mail: info@gwkent.com http://www.gwkent.com/
Winus C2-W3 Cooler	Mark Gonczy - Valley Vineyard Supplies P: 250-498-8815 Cell: 250-809-6211 Email: mark@vvsupplies.com http://www.vvsupplies.com/

Ingredient	Supplier
Free sulfur test kits	Bosagrape Winery Supplies Ltd. 6908 Palm Ave. Burnaby, BC V5J 4M3 Phone 604-473-9463 Toll free: 1866-554-7273 info@bosagrape.com
Yeast	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Yeast Nutrients	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Pectinase enzymes	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Potassium Metabisulphate	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Carbon Dioxide	Air Liquide #104- 1750 Dartmouth Road, Penticton, BC V2A 4B9 250-492-9681 Cell: 250-487-8195 Email: jmchernoff@hotmail.com
Processing Aids	Supplier
Bentonite	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Gelatin	Scott Laboratories Local warehouse located at 2324 Government St. Penticton (at Dawson) Contact Allan at 250-859-6466
Filter pads	Scott Laboratories Hubert Oliver, Kelowna, BC Phone: 250-764-2645 Cell: 250-868-7650 Email: hsoliver@shaw.ca
Packaging	Supplier
Bottle	Mission BottleWashing Ltd. 14209 Robinson Rd. PO Box 39 Summerland, BC V0H 1Z0 ph: (250) 494 - 8922 fax: (250) 494 - 8944
Crown	Scott Laboratories Hubert Oliver, Kelowna, BC Phone: 250-764-2645 Cell: 250-868-7650 Email: hsoliver@shaw.ca
Richard's Packaging	750 ml bottle Colletta 604-270-0111 http://www.richardspackaging.com/vancouver
4 pack tray	Crown Packaging contact Leslie (250) 212-2468
Master carton	Crown Packaging contact Leslie (250) 212-2468
Label	Keith Carlson, Summerland

DESCRIPTION OF EQUIPMENT NEEDED

VORAN Screen Belt Press EBP 350 c/w washer/elevator/grinder

- capacity up to 300 kg/hour, belt width 350mm, spread 240mm
- power required 0.37 kw, voltage your choice , includes frequency inverter

Price.....CAD\$18,988.
Options: Compressor to 10 bar.....CAD\$985.
High Pressure belt washer up to 200 bar.....CAD\$1486.

Delivered Canadian Port of Entry.

EBP 350 Technical dates

Single-belt press EBP 350	Inclined haulage SA
Stainless steel design with plastic bearing housings	Capacity
Maximal capacity (depending on kind of fruit and operating conditions)	up to 1000 kg/h
Yield	Rising height of washing tank
up to 70 %	350 mm
Belt width	Circle width
350 mm	240 mm
Belt length	Discharge height
4900 mm	1770 mm
Operative width	Feed
240 mm	1240 mm
Charging height (infinitely variable)	Discharge
0 - 50 mm	Overall length without crusher
Belt speed	2 m/min
Overall width	Overall length with crusher
240 mm	2400 mm
Driving motor	Overall height
0,37 kW/500 V/230 Hz	2030 mm
Water consumption	Discharge motor
2 litres per minute of operation	0,37 kW / 400 V / 230 Hz
Weight	Weight without crusher
350 kg	35 kg
	Weight with crusher
	100 kg

Technical modifications reserved!

Other Voran belt presses:
EBP 500
EBP 620
EBP 1200
SBP LC
SBP 620

voran

VORAN Maschinen GmbH, D-46332 Rhade/Wald
phone (+49) 0 71 89-1888-4, fax (+49) 0 71 89-1888-50, e-mail: office@voran.de, www.voran.de

Nominal capacity (depending on kind of fruit and operating conditions)up to 300 kg/h
Yieldup to 70 %
Belt width350 mm
Belt length4900 mm
Operative width240 mm
Charging height (infinitely variable)0 - 50 mm

Belt speed	2 m/min
Contact time	1 min
Driving motor	0,37 kW/400 V/50 Hz
Water consumption	2 liters per minute of operation
Weight	350 kg
Capacity	up to 1000 kg/h
Filling height of washing tank	755 mm
Chain width	235 mm
Discharge height:	
Fruit	1775 mm
Mash	1265 mm
Dimensions:	
Overall length without crusher	1870 mm
Overall length with crusher	2105 mm
Overall width	660 mm
Overall height	2055 mm
Driving motor	0,37 kW / 400 V / 50 Hz
Weight without crusher	55 kg
Weight with crusher	100 kg

FERMENTATION AND STORAGE TANKS (10,000 litre)



PUMPS

PROSPERO CATALOG | 2009

PUMPS

LIVERANI

PEC/Liverani pumps for must and wine

EP Mini

1.5" T/C fittings
10 GPM
110V or 220V Power
Forward + Reverse Switch
Fixed Speed

EP- Mini is the smallest flexible impeller pump that Liverani offers. Simple design, easy operation and affordable price makes this pump a perfect starter.



Factory cart

Midex VFN

1.5" T/C fittings
25 GPM
220 Volt Single Phase Power
Three Phase Motor
50 ft remote with forward +reverse and speed control
A.C. Frequency variable speed drive

The Midex is a totally new flexible impeller pump head from Liverani. Unlike the older 1.5" pump designs, the Midex uses a precision machined head made from a stainless steel casting. This precision construction allows the Midex to reach 3 bar of pressure.

The Midex is available in two models. The Midex-Direct single speed pump and the Midex-VFN with TB Wood's variable speed frequency drive. Both are mounted on our new highly mobile four wheel cart with large pneumatic tires. Midex-VFN has a rugged TB Wood's AC frequency drive. The speed can be varied both from the digital control panel on the pump or with the remote control pendant. The Midex-VFN can also be controlled by your monoblock. The Midex-VFN can operate on either single phase or three phase power.

Flexible impeller pump



Midex VFN

VAN 60



VAN 60

2.0" T/C fittings
0-55 GPM
220 Volt 2 HP Motor
Three Phase Motor only
25 ft power cable
Mechanical variable speed drive

VFN 60

2.0" T/C fittings
0-65 GPM
220 Volt 2HP 3PH Motor
Single or 3PH Power
50 ft remote with forward +reverse and speed controls
25 ft power cable
A.C. Frequency variable speed drive

VAN 80

3.0" T/C fittings
0-155 GPM
220 Volt 5 HP Motor
Three Phase Motor only
25 ft power cable
Mechanical variable speed drive

VFN 80

3.0" T/C fittings
0-155 GPM
220 Volt 5HP 3PH Motor
25 ft power cable
50 ft remote with forward +reverse and speed controls
A.C. Frequency variable speed drive

Perfect for must pumping



VFN 80
Flexible impeller pump

Only Prospero/AWS puts all of the right features on the pump like the Woods American built industrial variable speed drive. Only Prospero/AWS uses the well known Liverani flexible impeller pump heads. Only Prospero engineered the cart so you can roll the pump over hoses on the cellar floor. We did this by working with winemakers like yourself, to find what they needed in a pump. Then we accurately designed and built the right pump, the right way for you. Since we assemble these pumps ourselves, we control the quality and give you the best price.

Direct 60

2.0" T/C fittings
55 GPM
220 Volt 2 HP Motor
Three Phase Motor reversing switch/circuit breaker
25 ft power cable

Direct 80

3.0" T/C fittings
155 GPM
220 Volt 3 HP Motor
Three Phase Motor reversing switch/circuit breaker
25 ft power cable
50 ft remote with forward+reverse and speed controls

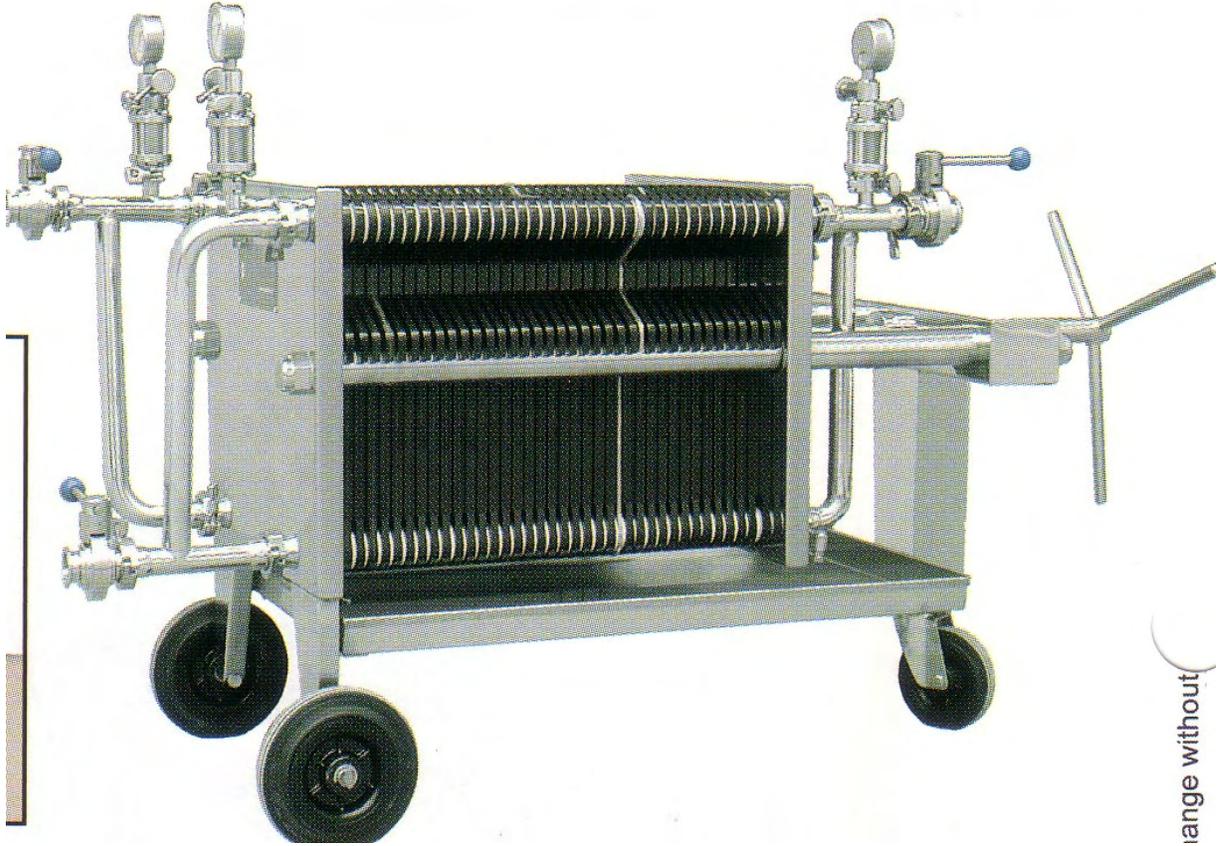
These pumps are suitable for wine, juice transfer and must pumping. Both have three phase motor which is reversible. Can also be mounted on our exclusive highly mobile stainless steel cart with large pneumatic tires, or on the factory cart .

Direct Drive Pump



Direct 80

PAD FILTER



range without

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STERILE CARTRIDGE HOUSING FOR .45 micron filter



Carbonation tank

“G” Series Brewery Tanks



Single Shell Cellar Tanks

Available Sizes: 5hl, 10hl, 15hl, 20hl

Include: Flanged & dished heads, 12" x 17" side oval manway, vacuum pressure relief valve, CIP line with guage, spray ball, TC outlet with butterfly valve, sample valve, TC side fitting with cap, on 3-stainless steel legs with foot pads. All 304, 2B stainless steel construction with indie welds ground and polished.

Rated: Maximum "14.9" psi working pressure. Additional options available.

“G” Series Tanks

Manufactured by:

Ripley Stainless



Custom made

8hl “G” Series Tank with larger manway and bright
#4 exterior finish (shown at right)



4 Spout Sparkling Filling Machine

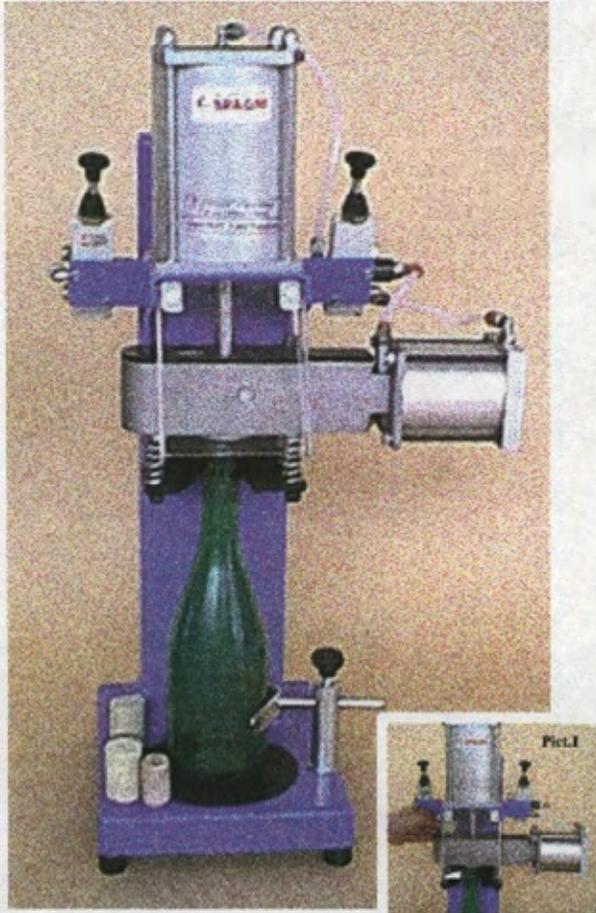


Details

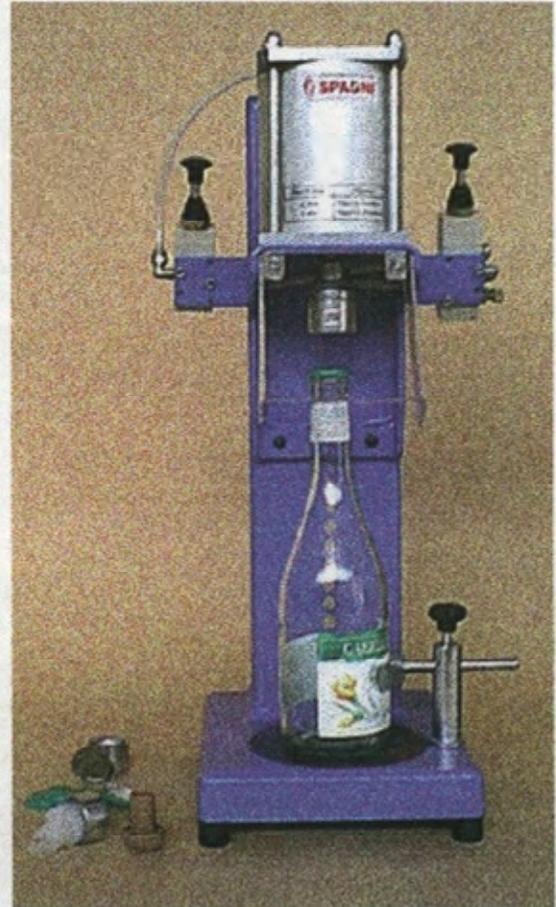
A manual counter pressure filling machine for any carbonated beverage, made of 304 stainless steel for champagne, beer, and cider. Interchangeable with many bottle height and diameter, fits beer bottle, champagne bottle and growler. Maximum bottle diameter 5.5". Table top designed with protective polycarbonate cover for bottling. Four filling stations, with production rate of 200 bottle / hour.

SEMI-AUTOMATIC CORKERS

AIRCORK



AIRCROWN



MAIN FEATURES

- COMPRESSED AIR FUNCTIONING : compressor not included (under request our Art 21181 21180)
- SEMI-AUTOMATIC BENCH MACHINE OPERATING WITH BOTH ONE BOTTLE AND ONE CAP AT A TIME (see picture 1)
- STAINLESS STEEL STRUCTURE VARNISHED WITH POWDERS
- REGULATION OF BOTTLE HEIGHT AND DIAMETER BY MEANS OF KNOBS
- DOUBLE CONTROL SAFETY PUSH-BUTTON PANEL -SAFETY TRANSPARENT DEVICE TO PREVENT FROM BLOWING UP

CHARACTERISTICS AIRCORK

- NATURAL CORKS, AGGLOMERATE and SYNTHETIC
- "FLAT" CLOSING OF GLASS BOTTLES
- PROPRIETARY CLOSING SYSTEM BY MEANS OF STAINLESS STEEL FOIL
- STAINLESS STEEL COMPONENTS in contact with the CORK
- FEEDING SYSTEM by manual inserting of a cork at a time
- OPERATING PRESSURE:
6bar until Diam 26mm (8bar until D 30mm)
- DOTATION : N.1 foil (spare) holding the cork
- MACHINE SUITABLE TO ACCOMODATE CA 5000PCS YEARLY

CHARACTERISTICS AIRCROWN

- CROWN CAPS, CHAMPAGNE PLASTIC CAPS
- CLOSING OF GLASS BOTTLES
- FEEDING SYSTEM BY MANUAL PLACING OF THE CAP ONTO THE BOTTLE
- OPERATING PRESSURE: 6bar
- DOTATION : N.1 head for crown cap diam.26,5mm
N.1 head for crown cap diam. 29mm
N.1 head for champagne plastic cap
- MACHINE SUITABLE TO ACCOMODATE CA 5000PCS YEARLY

TECHNICAL TABLE

ART.	MODEL	SIZES mm									
		CAPS DIAM			BOTTLE				MACHINE		
		Min	Max	Hole min	H min	Hmax	D Max	A	B	H	Kα
20596	AIRCORK	20	30	19	150	450	130	280	380	670	20
20597	AIRCROWN	26,5-	29	19	150	450	130	280	270	600	16

ATTENTION The output data are approximative and not binding. The above mentioned data can be updated and changed

USED TUNNEL PASTEURIZER



SEMI-AUTOMATIC LABELING MACHINE AP-362



Details

The perfect semi-automatic labeling solution for cylindrical containers as well as many tapered containers, including bottles, cans, jars and tubes. Set-up and operation is fast and easy. 1. Set the guides 2. Place your container in the machine 3. Press the foot switch to apply label The built-in spring-loaded pressure arm makes sure labels are applied firmly and without wrinkles. You'll be able to apply labels at speeds of up to 1200 per hour. Labels are perfectly applied without wrinkles, giving your finished products a highly professional look. It can apply one or two different labels to a single container. A built-in LED counter and memory for up to nine front-to-back label offsets is also included. Features: * Quick set-up and easy operation * Accurately applies labels to front and back with variable spacing * Fast – up to 1200 bottle per hour * Compact size – fits on most desks and counter tops * Professionally designed – one of the only semi-automatic label applicators available with UL, CSA and FCC safety and emissions certifications * Industrial strength – built with heavy-duty sheet metal and steel for long life Specifications: * Container Width: 1" to 9.4" (25.4mm to 238mm) * Container Diameter: 0.6" to 6.7" (15mm to 170mm) * Container Shape:

Winus C2-W3 Cooler



C2-W3 COOLER

Small, compact and easy to use: WINUS C2-W3 glycol water cooler is designed to control automatically the temperature of one final unit.

From the control panel is possible to check and set the temperature of glycol mixture and wine and to control possible alarms.

It's complete of circulation pump, storage tank and hydraulic accessories.

Up to 6 different tanks can be controlled by installing an extra control panel and motorised valves.

SUMMARY OF CIDER WORKSHOP SAMPLING SCORES

Ten ciders were sampled and scored between 0 and 10 for several characteristics by 16 people. A score of 10 was the best possible score. The characteristics judged were acidity, aroma, astringency, colour, finish, flavour, sweetness and overall preference. For each cider type the mean score for each characteristic was calculated (see figures below). Cider blend M 15 consistently scored in the top three for most categories including acidity, aroma, colour, flavour, sweetness and scored the highest in overall preference. Cider blend F 10 was also a favourite, scoring in the top three for acidity, aroma and sweetness. This blend scored second highest in overall preference.

Summary of ciders sampled:

Dukes – Firewood Brewing Company – 5% alc/vol

Grower 1927 – Growers – 5.5% alc/vol

Rock Creek - Big Rock Brewing – 5.5% alc/vol

Strongbow - HP Bolmer – 5.3% alc/vol

Mac – 1/3 Mac- 1/3 Breaburn- 1/3 Pink Lady – 7.6 % alc/vol

M-10 – Mac diluted to 5.5% alc/vol with 10% frozen apple juice + water

M – 15 - Mac diluted to 5.5% alc/vol with 15% frozen apple juice + water

F - 50% Mac(1/3 of M, B and PL)+ 50% Fuji – 7.8% alc/vol

F-10 – F diluted to 5.5% alc/vol with 10% frozen apple juice + water

F-15 - F diluted to 5.5% alc/vol with 15% frozen apple juice + water

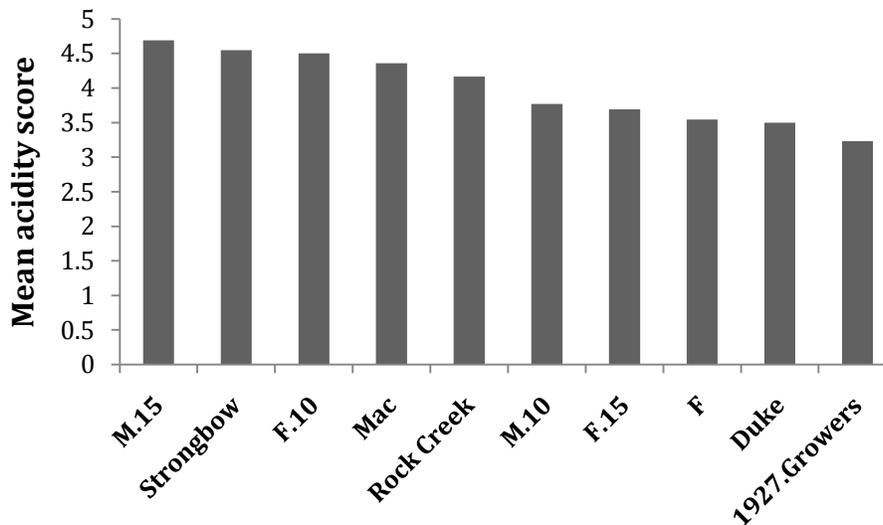


Figure 1. Mean acidity score. Blend M 15 scored the highest for acidity, followed by Strongbow and blend F 10.

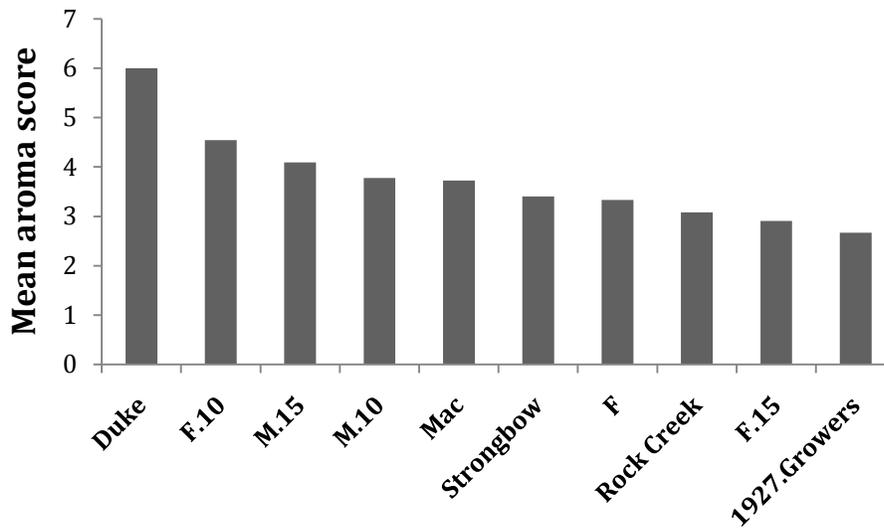


Figure 2. Mean aroma score. Duke topped the list but was followed by blend F 10 and blend M 15.

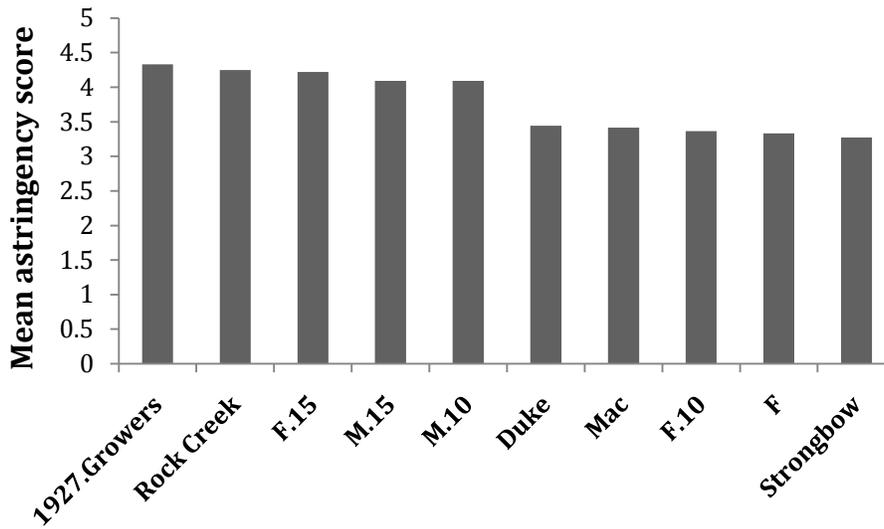


Figure 3. Mean astringency score. 1927 topped the list and blends F 15 and M 15 were 3rd and 4th.

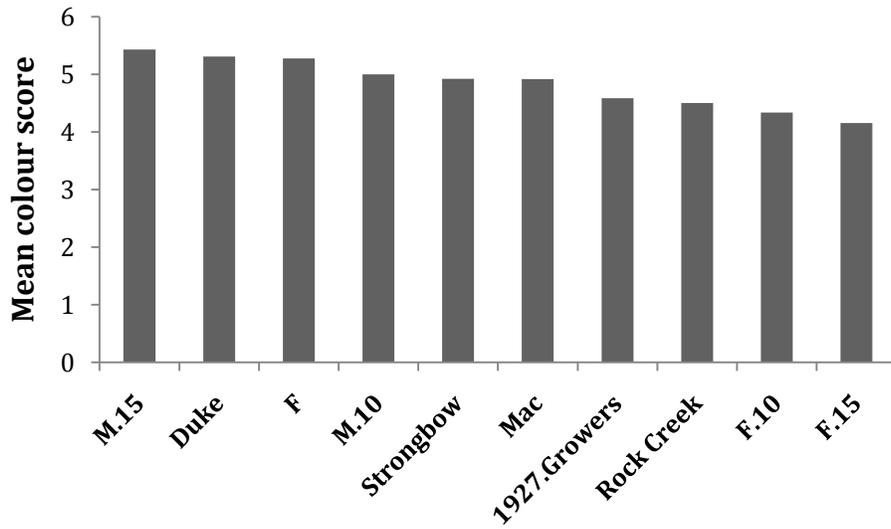


Figure 4. Mean colour score. Blend M 15 topped the list followed by Duke and F.

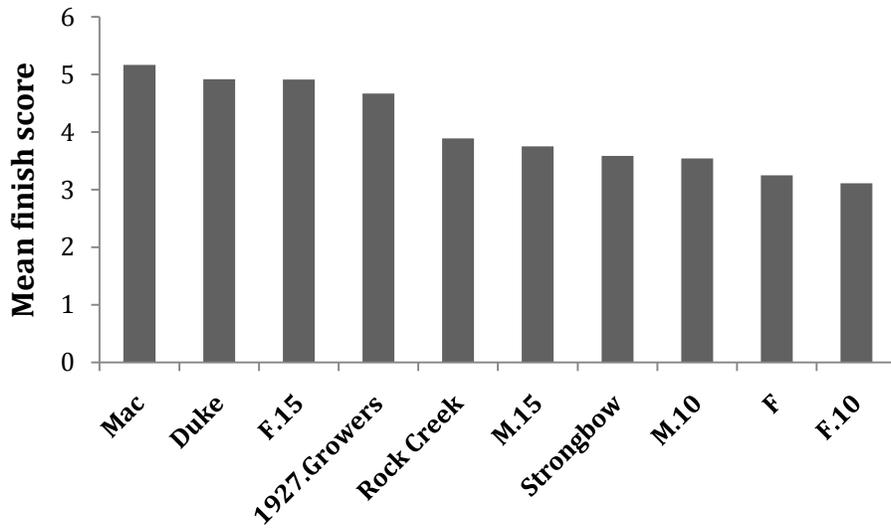


Figure 5. Mean finish score. Mac topped the list followed by Duke and blend F 15.

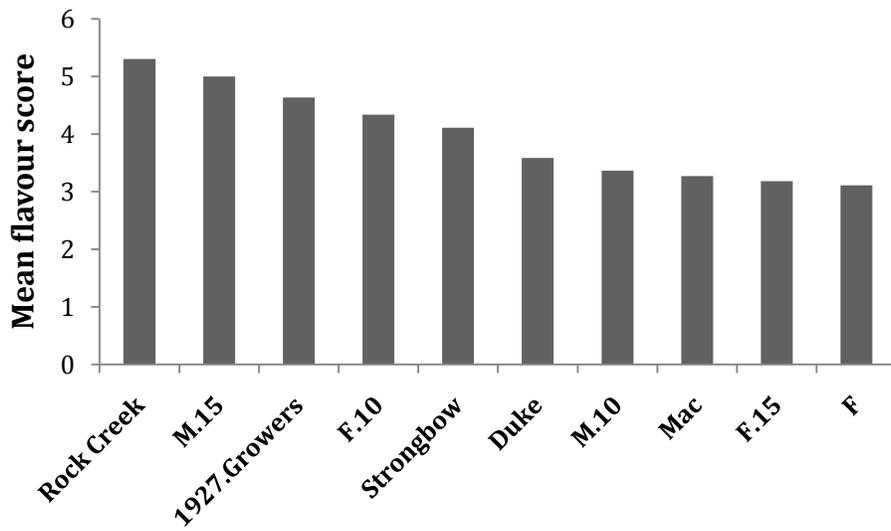


Figure 6. Mean flavour score. Rock Creek topped the list but was followed closely by blend M 15 and by 1927 Growers.

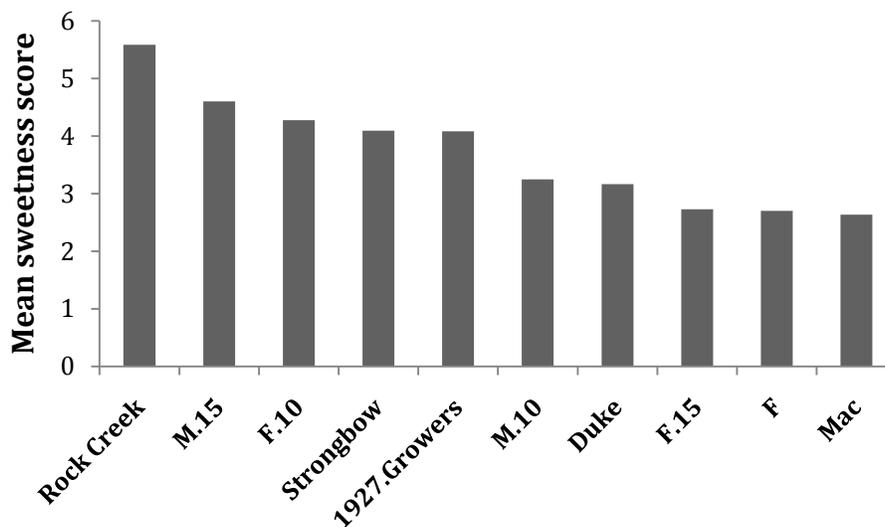


Figure 7. Mean sweetness score. Rock Creek topped the list and was followed by blend M15 and F 10.

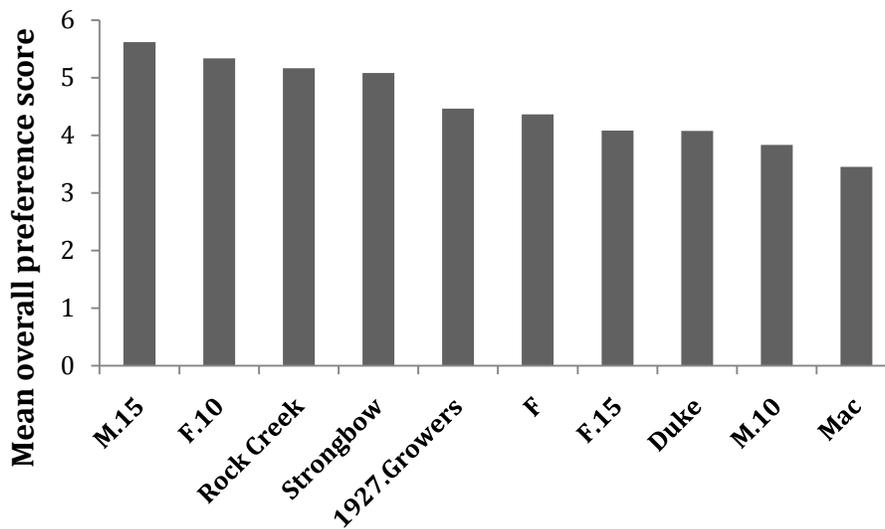


Figure 8. Mean overall preference score for the 10 ciders sampled. The top two preferred ciders were blends M 15 and F 10.