

# ***GROWER WORKSHOP FOR AMBROSIA APPLE***



***JANUARY 23, 2001  
SUMMERLAND, B.C.***

***PROCEEDINGS***



Ministry of Agriculture,  
Food & Fisheries



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# **GROWER WORKSHOP FOR AMBROSIA**

Date: Tuesday, January 23, 2001

Place: The Main Conference Room  
Pacific Agri- Food Research Centre  
Summerland, B.C.

Time: 8:30 a.m. – 12:30 p.m.

Chairperson: Jim Campbell - B.C. Ministry of Agriculture,  
Food and Fisheries

## **AGENDA**

- |       |   |   |
|-------|---|---|
| 8:30  | <b>Introduction</b>   | <i>Jim Campbell</i>                           |
| 8:45  | <b>Rootstocks</b>   | <i>Ken Haddrell</i>                           |
| 9:00  | <b>Bench Grafts – Growing In Place</b>  | <i>Peter Waterman</i>                         |
| 9:20  | <b>Management of the:</b> <ul style="list-style-type: none"><li>• Tree</li><li>• Crop</li></ul> | <i>Jack Barkwill</i>                          |
| 9:35  | <b>Discussion</b>   |   |
| 9:45  | <b>Coffee and tea break</b><br>Sponsored by Farm Credit Corporation, Kelowna                    |   |
| 10:10 | <b>Harvest Parameters – Optimum<br/>Maturity, Storage, Shelf Life</b>                           | <i>Sam Lau, Stan Swales<br/>and Bill Wolk</i> |
| 10:45 | <b>Report on Marketing Survey</b>   | <i>Allan Koebel,<br/>Benchmark Research</i>   |
| 11:15 | <b>Quality Assurance and Standards</b>  | <i>Bill Wolk, Brian Mennell</i>               |
| 12:00 | <b>Discussion – Where to from here?</b>   | <i>Jim Campbell</i>                           |
| 12:30 | <b>Adjourn</b>  |   |

# INTRODUCTION TO AMBROSIA

By Jim Campbell  
 Provincial Tree Fruit Specialist, BCMAFF

Ambrosia Tree



Ambrosia Apple

- Great Name
- Great Taste
- Distinctive
- Consumers like it
- Juicy
- Fine texture
- Distinctive flavour
- Attractive
- Grown only in BC
- Real opportunity for BC growers

<b>Ambrosia Planting Trends</b>											
		<b>Projected Fresh Production in lbs</b>									
	<b>Acres</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
1996	2	0	6000	18000	25200	34000	34000	34000	34000	34000	34000
1997	4	0	0	12000	36000	50400	68000	68000	68000	68000	68000
1998	8	0	0	0	24000	72000	100800	136000	136000	136000	136000
1999	12	0				36000	108000	151200	204000	204000	204000
2000	56	0					168000	504000	705600	952000	952000
2001	100	0						300000	900000	1260000	1700000
2002	150	0							450000	1350000	1890000
2003	250	0								750000	2250000
2004	300	0									900000
2005	300	0									
<b>Total Pounds</b>			6000	30000	85200	192400	478800	1193200	2497600	4754000	8134000
<b>Cartons</b>			143	714	2029	4581	11400	28410	59467	113190	193667

# **ROOTSTOCKS**

By Ken Haddrell

## **M27**

### **SIZE CLASS 1-2**

- very dwarfing, may be too dwarfing for plantings in BC
- very precocious, reduced fruit size
- highly susceptible to fire blight
- needs support system

## **BUD491**

### **SIZE CLASS 2**

- about the same size as M27
- may be too dwarfing for plantings in BC
- extremely cold hardy
- limited information as to any susceptibilities
- possible improvements in fruit quality over M27
- needs support system

## **OTHERS**

**P22**

### **SIZE CLASS 1**

- inconsistent across sites for the level of vigor control
- low vigor and low cumulative yield at PARC
- may not be suitable for BC
- needs support system

**P16**

### **SIZE CLASS 2-3**

- intolerant of light soils and water stress
- inconsistent in PARC trials for vigor control
- may not be suitable for BC
- needs support system

**M9**

### **SIZE CLASS 3**

- well suited to Super Spindle
- good choice for use in high density plantings
- high productivity and precocity
- M.9, all subclones and close relatives are very susceptible to fire blight
- shallow, relatively weak root system
- sensitive to water stress
- needs support system

**Bud 9****SIZE CLASS 3**

- well suited to high density plantings, more vigorous tree than M9
- similar fruit size and quality as M9
- extremely winter hardy
- not adequately tested for fire blight resistance, may be more tolerant than M.9
- more resistant to crown and root rots than M.9 in some trials
- strong competitor to M.9, gaining in popularity in North America
- needs support system

**O.3****SIZE CLASS 3-4**

- winter hardy rootstock
- intermediate vigor between M.9 and M.26
- susceptible to fire blight
- virus indexed scionwood is more than strongly recommended whenever propagating O.3 nursery trees. O.3 has shown extreme susceptibility to latent viruses. Virus infections of can result in extremely low budtake and high tree failure in the field.

**M 26****SIZE CLASS 4**

- slightly less precocious than M.9
- extremely susceptible to fire blight
- can be good choice for high density plantings in poorer soils
- risky choice for use with fire blight susceptible scion cultivars
- somewhat drought susceptible, but also sensitive to Phytophthora spp. induced root rots.
- good drainage is essential
- can need support

**Mark****SIZE CLASS 2-4 (HIGHLY VARIABLE)**

- requires support, very strong support when planted with triploid scion cultivars due to poor graft union strength
- Root Mass Proliferation, a tumorous swelling at the ground line or below ground, is often observed in this rootstock, and may account for its highly variable performance both within and between orchards and often results in a lack of uniformity in fields
- also particularly drought sensitive
- can “runt out” if overcropped
- particularly sensitive to fire blight
- needs support system

**MM.106****SIZE CLASS 7**

- not recommended for high density plantings
- larger than necessary for most applications
- susceptible to fire blight, questionable cold hardiness
- creates a free standing tree
- may be a good choice for spur type scion varieties on poor, light soils
- very susceptible to crown rot



**MM.111****SIZE CLASS 8**

- very tolerant of a wide range of soil conditions
- may be appropriate for use with spur type scion varieties, on poor dry sandy soils, and on heavy soils where MM.106 would fail
- produces large trees
- use is limited to extreme situations and home gardens
- the most drought tolerant clonally produced apple rootstock

**M.7****SIZE CLASS 6**

- high tolerance to fire blight and root diseases
- may be useful with spur-type scion cultivars and on very poor sites
- use is declining in North America
- moderately productive and suckers heavily

**The Geneva Series**

Misidentifications have delayed the testing and release of the Geneva Series. More testing is required.

**G 16****SIZE CLASS 3-4**

- about M9 size
- fire blight resistant
- very sensitive to latent viruses

**G 11****SIZE CLASS 3-5**

- size has yet to be determined
- moderately resistant to fire blight
- extremely productive

**G.30****SIZE CLASS 5-6**

- very productive
- excellent fire blight resistance
- brittle wood and requires strong support
- not recommended for use with brittle type varieties (eg. Royal Gala)

# AMBROSIA

## BENCH-GRAFTS?

By Peter Waterman  
Horticultural Consultant, Summerland

- Are the choice to achieve the necessary densities at a reasonable cost
- But they are only a choice if you can minimize losses, otherwise it is better to plant healthy whips of good caliper or
- Sleeping eyes are also a choice and may be more successful
  - more root
  - more carbohydrate storage

### **Risk**

- Grower assumes risk normally taken by the nurseryman
- Ambrosia/bench graft losses seem to be higher than normal for bench-grafts
- Losses range up to 30% and higher
- Bench-grafts generally appear to be more sensitive to soil moisture and soil temperature than sleeping eyes and trees
- Ambrosia may be particularly sensitive this may be especially so for Ambrosia on M9. Bud 9 seems to be more successful

### **Soil moisture**

- Irrigate prior to planting, or prior to laying plastic
- Don't over do it, just nicely moist to 10 to 15 cm
- Bench-grafts will not need watering again until they start to push leaf, even then check with the squeeze test
- Excessive water tends to create very cool soil temperatures in April or May
- Easy for Phytophthora and other soil borne diseases to get started
- May need to apply Alliette as a soil drench or foliar plus soil drench

- Drip irrigation may only be required for 15 or 20 minutes every other day once growth starts, increase time and frequency as growth and conditions demand
- Charge the lines with water for 5 minutes and start fertigating with a very concentrated solution and fertigate for the 20 minutes or so that is needed for watering, don't worry about clearing lines

### **High phosphorus**

- Most bench-grafts seem to do well on about 20 to 30 gms of P205 per plant, versus 55 gms to 60 gms for trees
- With 10-34-0 that's about 60 ml in total per plant to be applied in the early part of the season
- Apply as much as you can over the first month without over watering, you can supplement with additional N once there is more leaf surface

### **Fertigation**

- If you are really restricted by slow injection rates due to low pressure or a narrow pressure differential, you can't afford to fertigate and irrigate for extended lengths of time
- Fertigate only as long as necessary for watering. If you can't irrigate, foliar feed
- Supplement with a weekly foliar program with 20-20-20 plus Magnesium, Zinc and Boron

### **Non-fertigated**

- Side dress with high P fertilizer
- Break the 20 to 30 gms into several applications to avoid salt burn
- Shallow root system – water for short periods of time and monitor with squeeze test
- Success
- Good consistent management
- Pay attention to each operation
  - Land prep, spade deeply to facilitate good drainage
  - Handle plants carefully, grafts can break, no air gaps – two finger test
  - Soil moisture – monitor carefully
  - Inspection for pests, diseases
  - Staking
  - Disbudding
  - Weed control

# **AMBROSIA - TREE & CROP MANAGEMENT**

**Mr. Jack Barkwill, Fieldmen  
BC Fruit Packers Cooperative, Summerland**

**FIRST RULE  
DON'T DROWN YOUR BABIES!!!!**

## **SUPER SPINDLE**

**SPURRY GROWTH HABIT**

**EARLY PRODUCTION**

**FASTER RETURNS**

## **SS TRAINING HINTS**

**DO NOT HEAD  
BENCH OR STUB CUT  
50% RULE = 1/3 RULE  
HEAD LATE IF NECESSARY  
FEED**

## **SPINDLE**

**DELAYED HEADING  
REMOVE COMPETITIVE SHOOTS  
PINCH TO EVEN UP GROWTH  
FEED**

## **PRUNING CROPPING TREES**

**50% RULE**

**COUNT THE BUDS**

**SHORTEN BRANCHES ON SS**

**LARGER BRANCH IS STRONGER**

**BRANCH ABOVE IS STRONGER**

## **THINNING**

**COUNT THE FRUIT**

**ONE BIN OF SIZE 100'S = 2000 APPLES**

**ONE BIN OF SIZE 80'S = 1600 APPLES**

## **TOP CONTROL**

**1 PART FRUIT FIX**

**3 PARTS H<sub>2</sub>O**

**WET 3" - 4"**

**2 YEAR WOOD AND OLDER**

**BIGGER WOOD - BIGGER AREA**

**DURING GROWING SEASON**

# **Harvest, Storage and Shelf-life of 'Ambrosia' Apples**

**(1994-96, 1999)**

**January 23, 2001**

**O.L. (Sam) Lau, Ph.D.**

**Industry Research Program**

**Okanagan Federated Shippers Association**

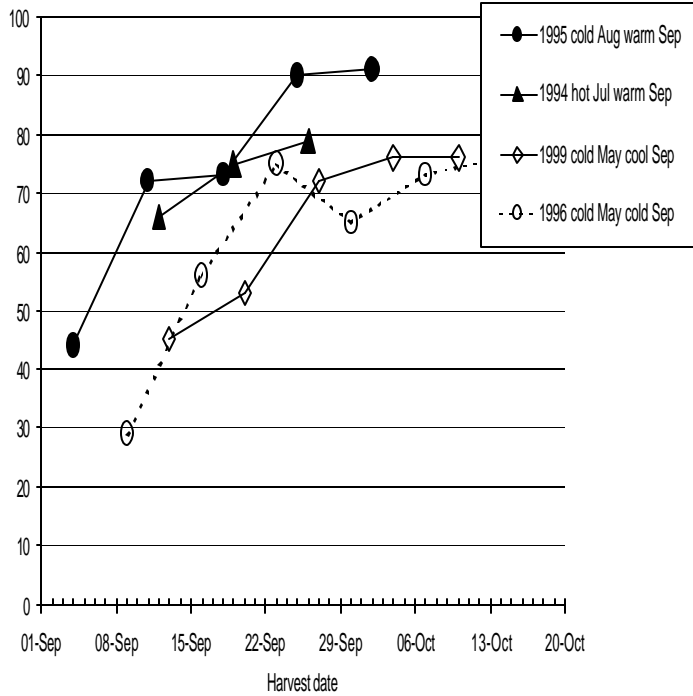
## Acknowledgements

- G. Chadburn, D. Gartrell, R. Mennell, R. Vollo, J. Barkwill
- K. Kont, L. Qi, P. Schofield, W. Urban, R. Yastremski
- Okanagan Plant Improvement Co. (PICO)
- Okanagan Federated Shippers Association
- Pacific Agri-Food Research Centre

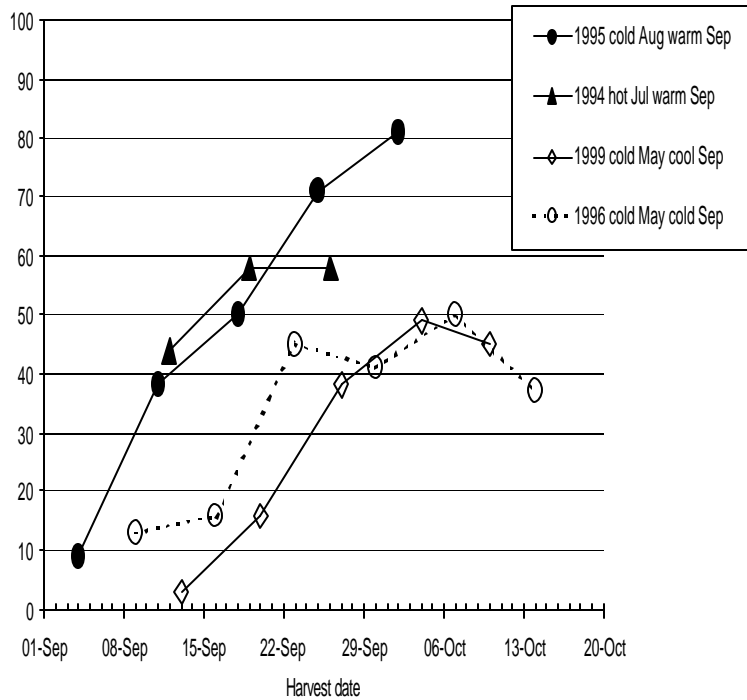
## Ambrosia

- Not a full color apple -- Total red color:
  - 75-80% (1994)
  - 70-90% (1995)
  - 65-75% (1996, 1999)
- Low acids
  - 1/2 as much as 'McIntosh'

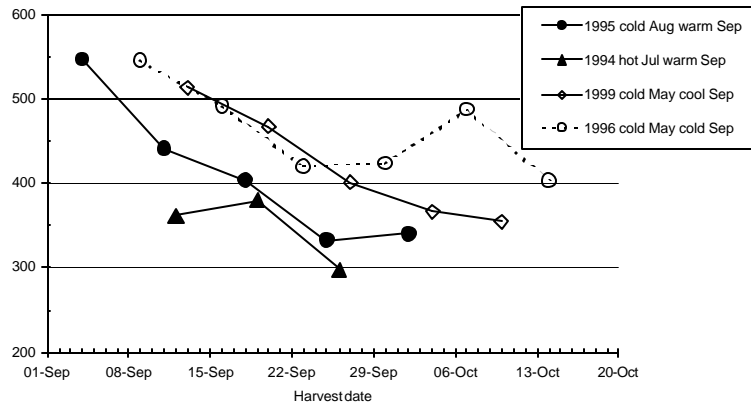
### Total Red Color 'Ambrosia'



### Solid Red Color 'Ambrosia'



## Titratable Acidity (mg Malate per 100 ml juice) 'Ambrosia'

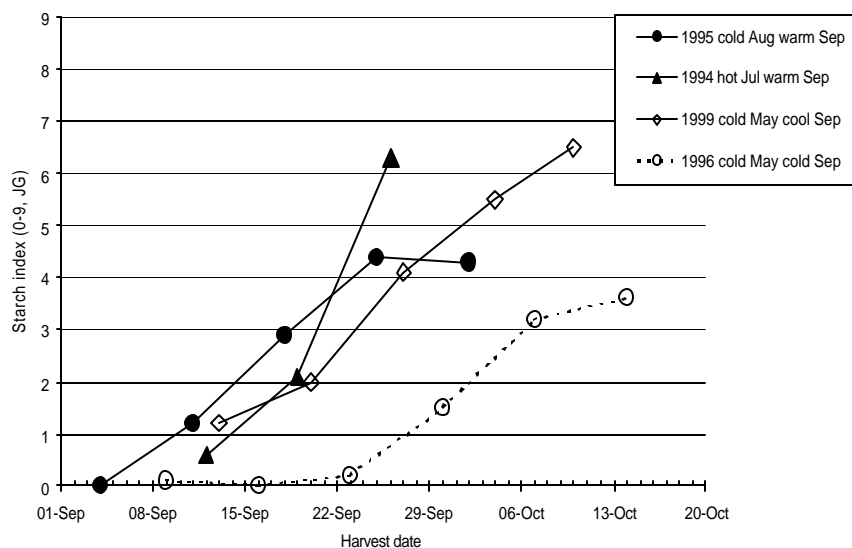


MC 764 JG 727  
 GD 576 SP 519  
 AM 380 RD 313

## Harvest Index

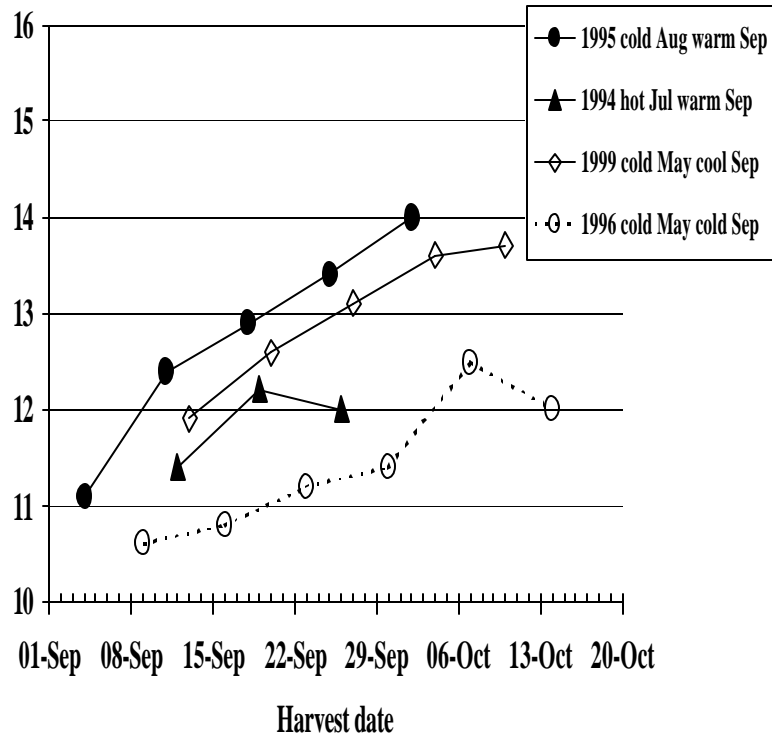
**Starch index** - A practical and reliable harvest index for 'Ambrosia'  
**Red skin color and flesh firmness** - Not reliable indices

## Starch Index at Harvest - 'Ambrosia'

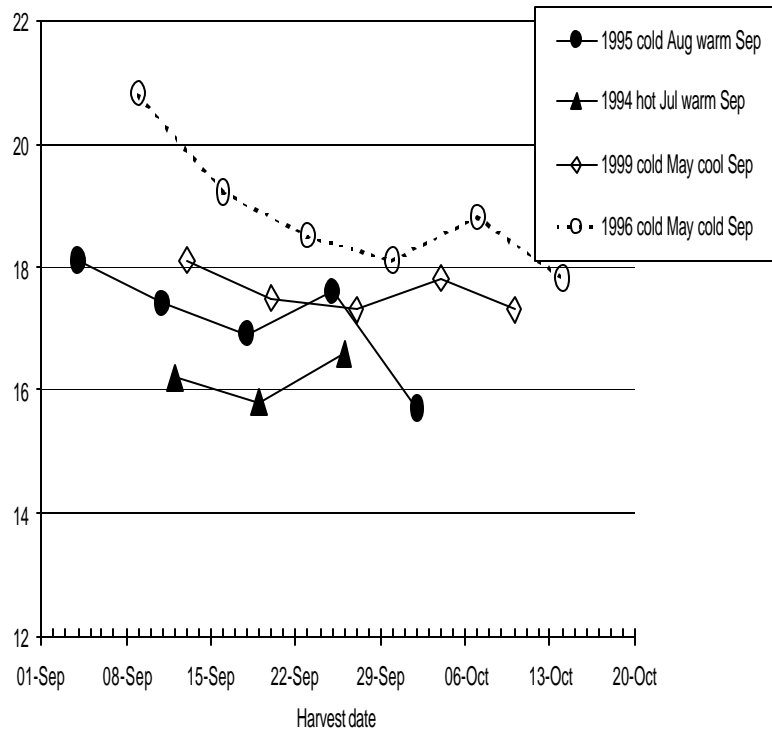




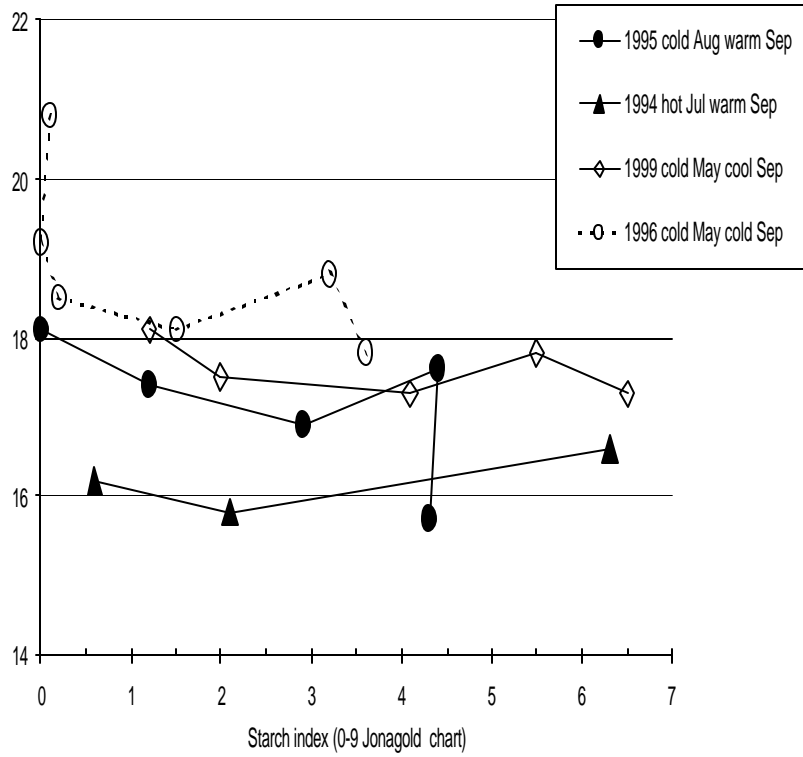
### Soluble Solids at Harvest - 'Ambrosia'



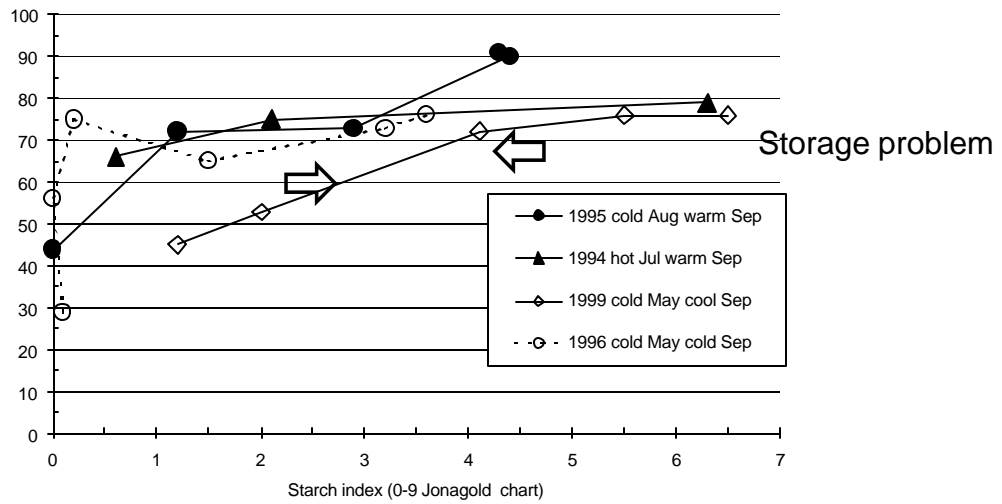
### Flesh Firmness at Harvest - 'Ambrosia'



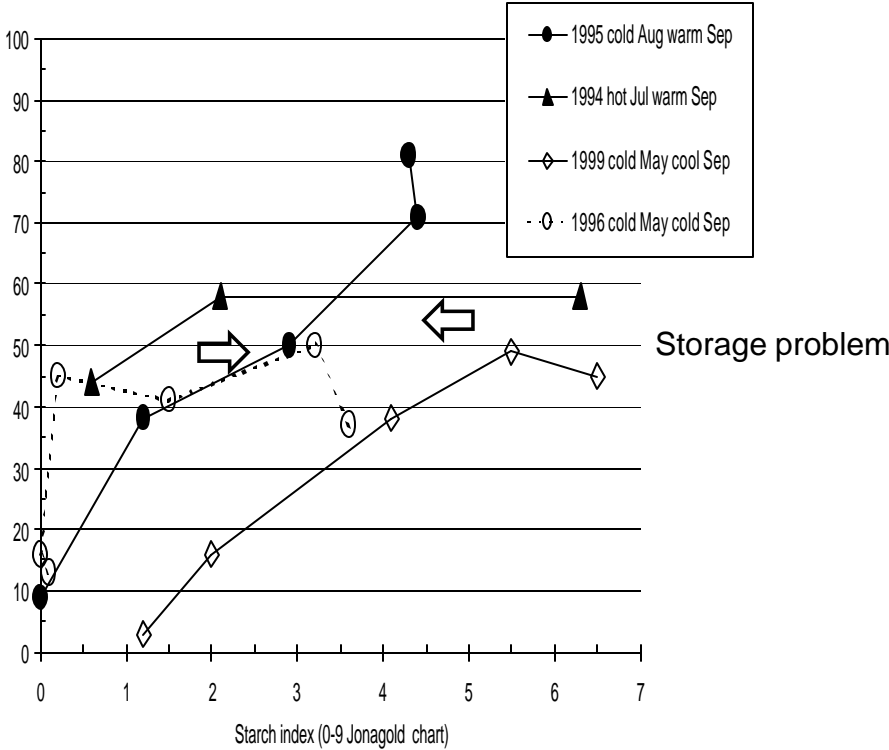
### Flesh Firmness (lbs) vs. Starch Index 'Ambrosia'



### Total Red Color (%) vs. Starch Index 'Ambrosia'



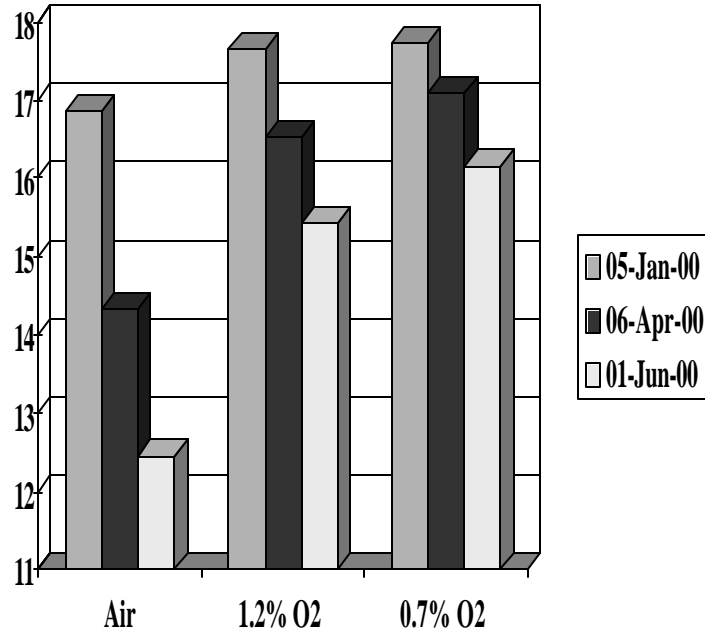
**Solid Red Color (%) vs. Starch Index 'Ambrosia'**



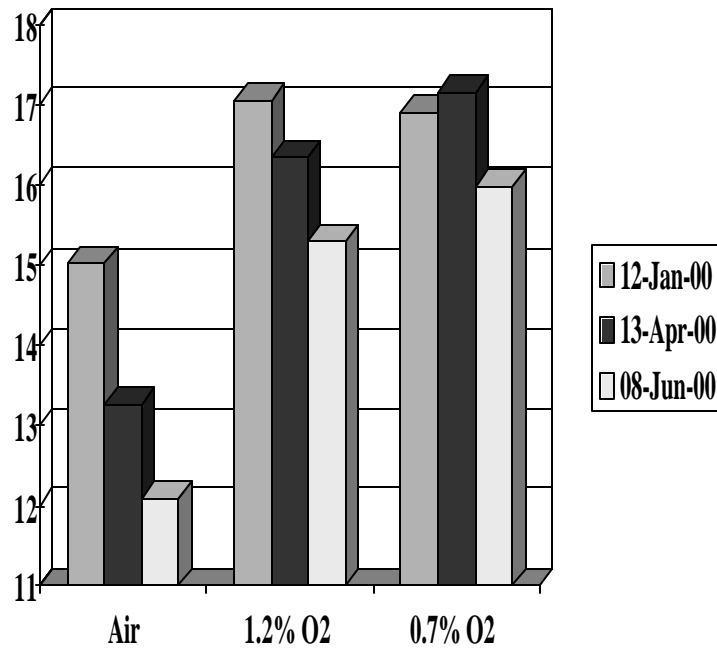
**Correct maturity & CA storage ⇒ High storage quality**

- Flesh firmness
- Titrateable acidity
- Reduced storage disorders

**'Ambrosia' Flesh firmness (lbs) Air vs. CA (1.2%, 0.7% O<sub>2</sub> , Day-0)**



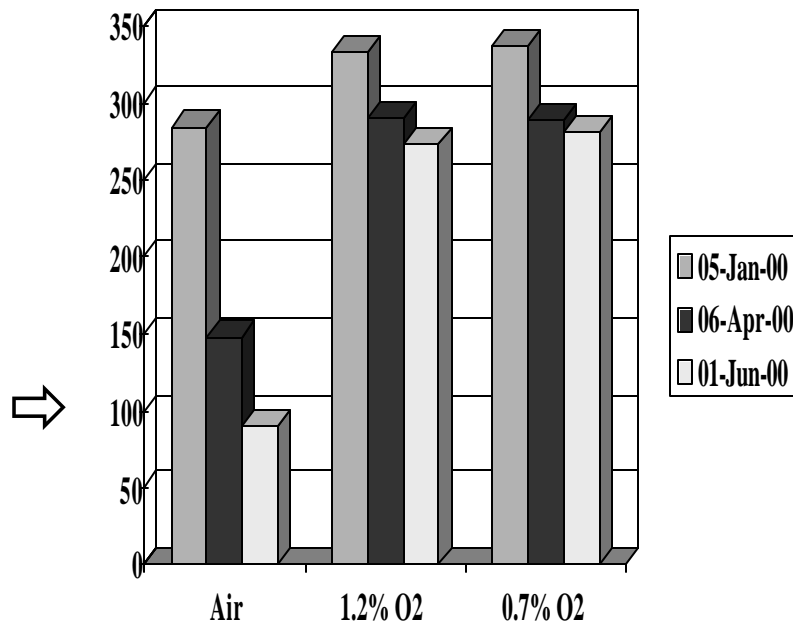
**'Ambrosia' Flesh firmness (lbs) Air vs. CA (1.2%, 0.7% O<sub>2</sub> , Day-7)**



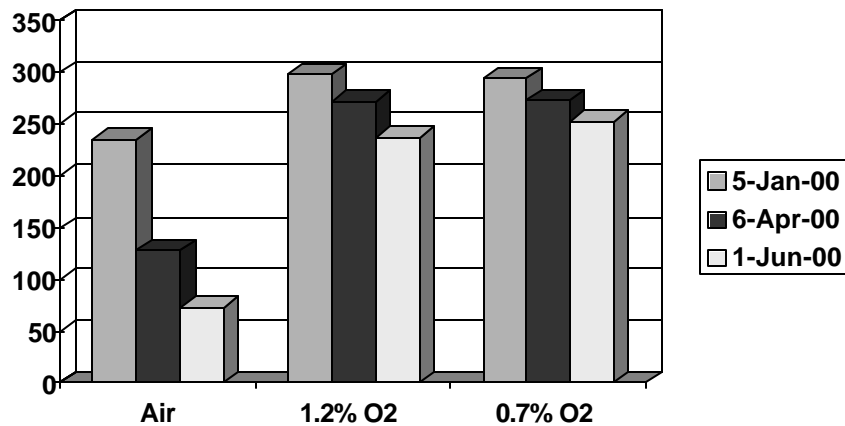
Firmness Drop During  
Shelf-life Test @ 20°C for 7 days

- 0 to 2.4-pound drop, depending on
  - the season
  - storage regime
  - length of storage
- 4-year average
  - 1.6-pound drop (Air, 4-month)
  - 0.5-pound drop (CA, 6 month)

**Ambrosia Juice Acidity (mg/100 ml) Air vs. CA (1.2%, 0.7% O<sub>2</sub> , Day-0)**



**Ambrosia Juice Acidity (mg/100 ml) Air vs. CA (1.2%, 0.7% O<sub>2</sub> , Day-7)**



## Harvest maturity & CA storage

Flesh breakdown (1995, 1999)

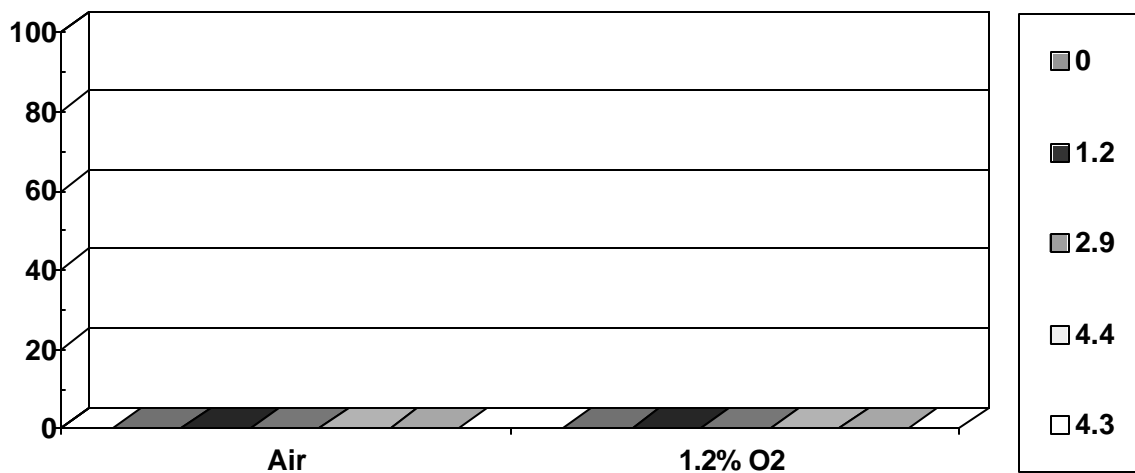
Key weakness

Due to late pickings and prolonged air storage

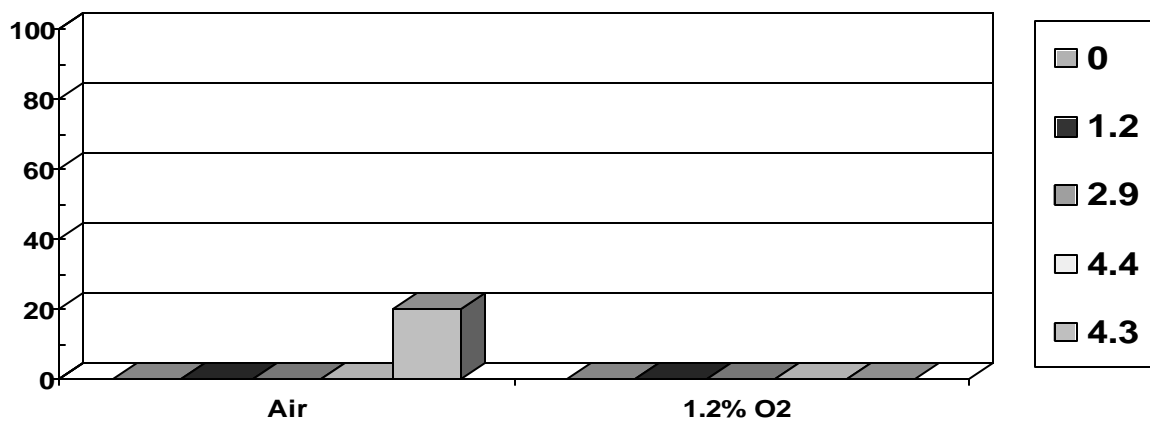
Controlled by correct maturity & CA storage

CA storage reduces, but will not adequately control flesh breakdown in late-picked fruit

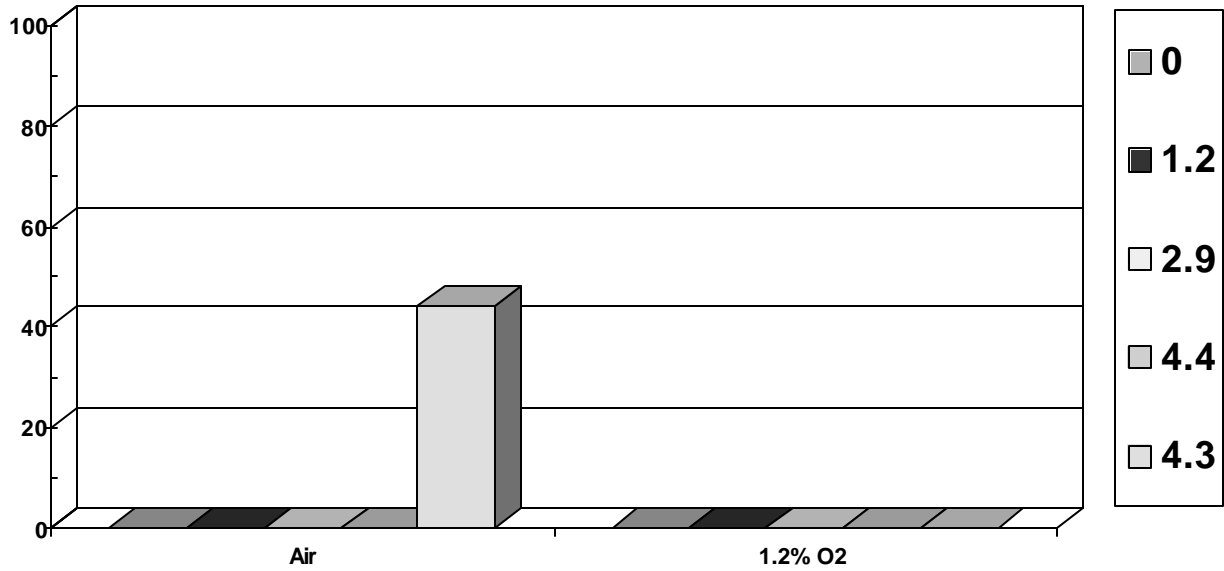
**Ambrosia Flesh Breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>  
24-Jan-1996, Day-0)**



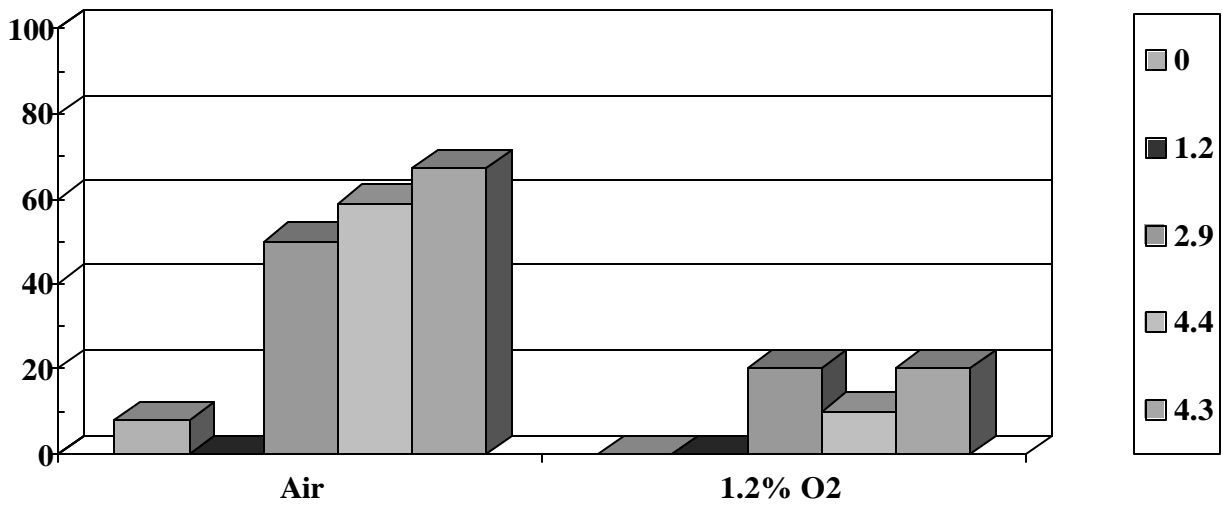
**Ambrosia Flesh Breakdown (%) Maturity & Air vs. CA  
(1.2%, 0.7%, 0<sub>2</sub>, 31-Jan-1996, Day-7)**



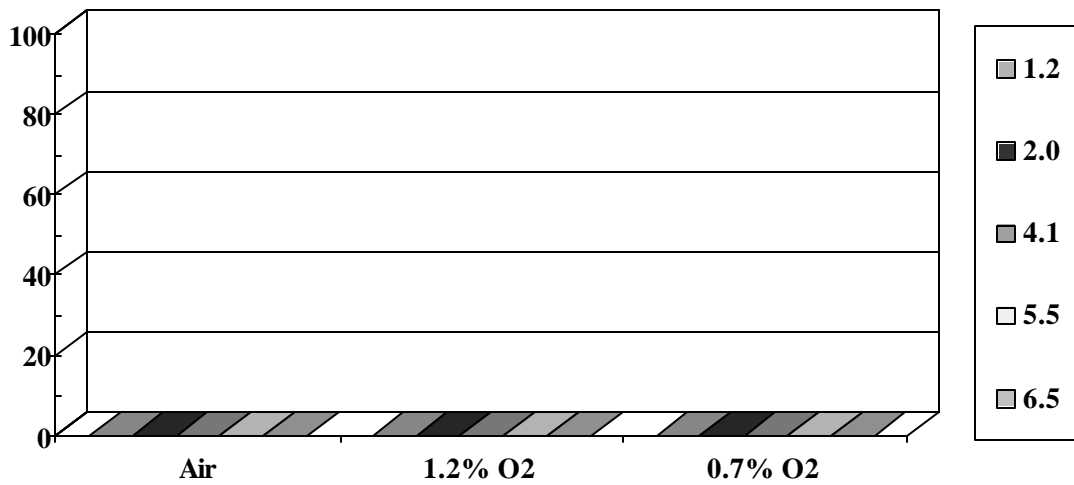
**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 20-Mar-1996, Day-0)**



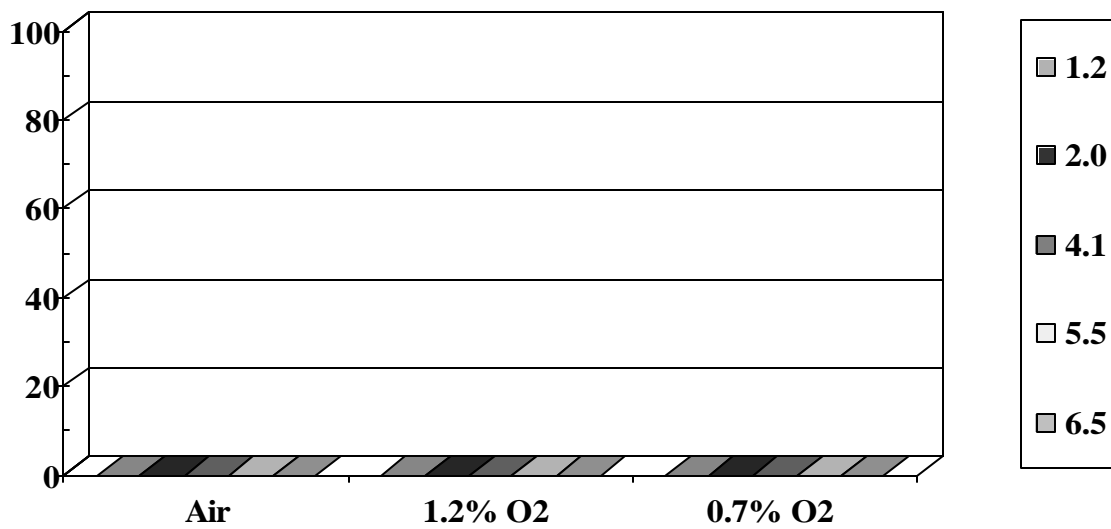
**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 27-Mar-1996, Day-7)**



**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 5-Jan-2000, Day-0)**

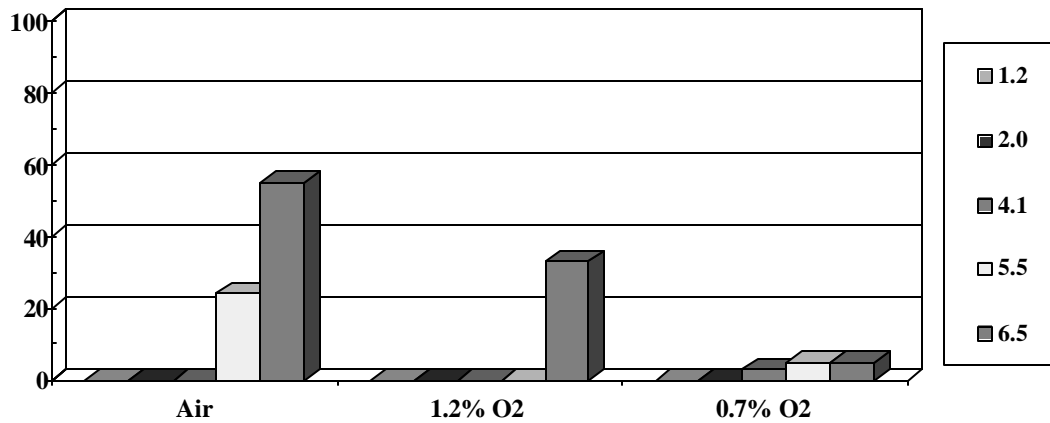


**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 12-Jan-2000, Day-7)**

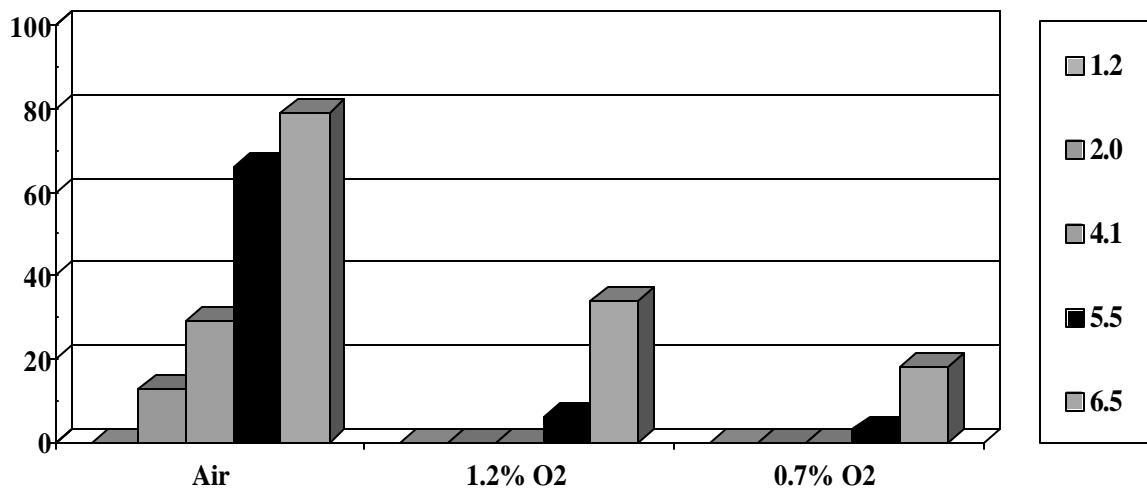




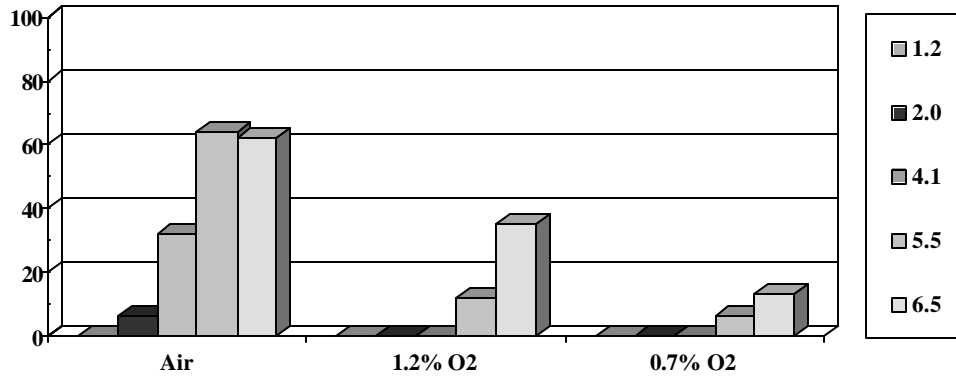
**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 6-Apr-2000, Day-0)**



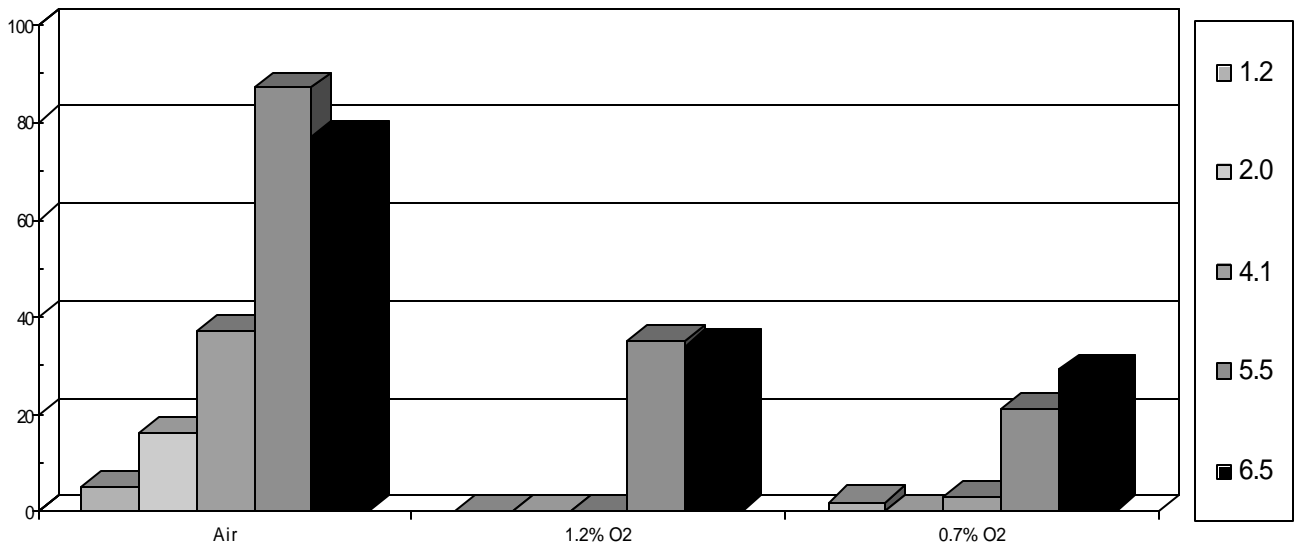
**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 13-Apr-2000, Day-7)**



**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 1-Jun-2000, Day-0)**



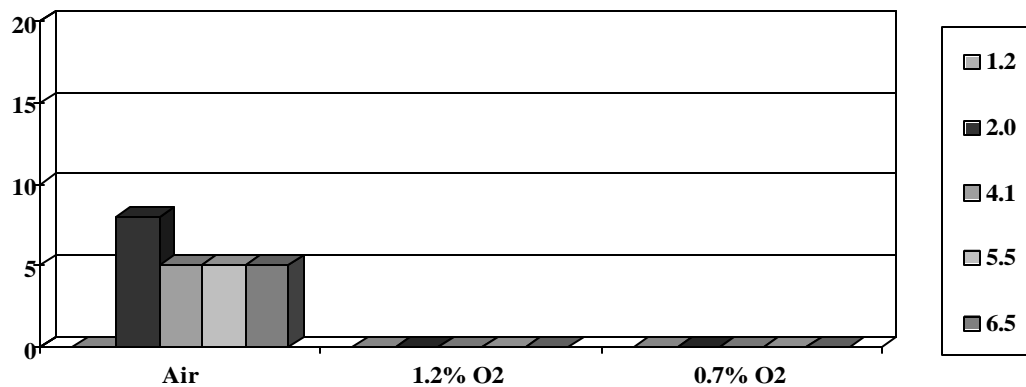
**Ambrosia Flesh breakdown (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 8-Jun-2000, Day-7)**



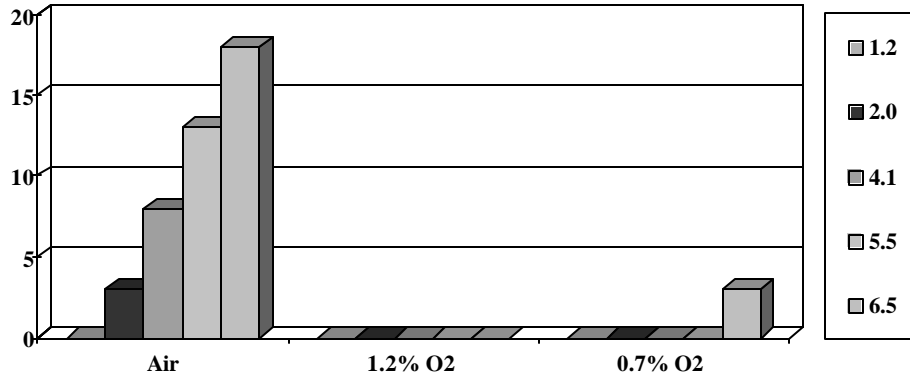
## Harvest maturity & CA storage

- Soft scald (sharply defined, irregularly shaped, smooth brown areas)
  - A low-temperature disorder (<2.2°C)
  - Develop rapidly between mid Nov and late Dec
  - Reduced by correct maturity & prompt cooling
  - Or, at 2.5°C for the first 6-8 weeks
- 1994 & 1999
  - Related to air storage & advanced maturity
  - Markedly reduced by storage in CA

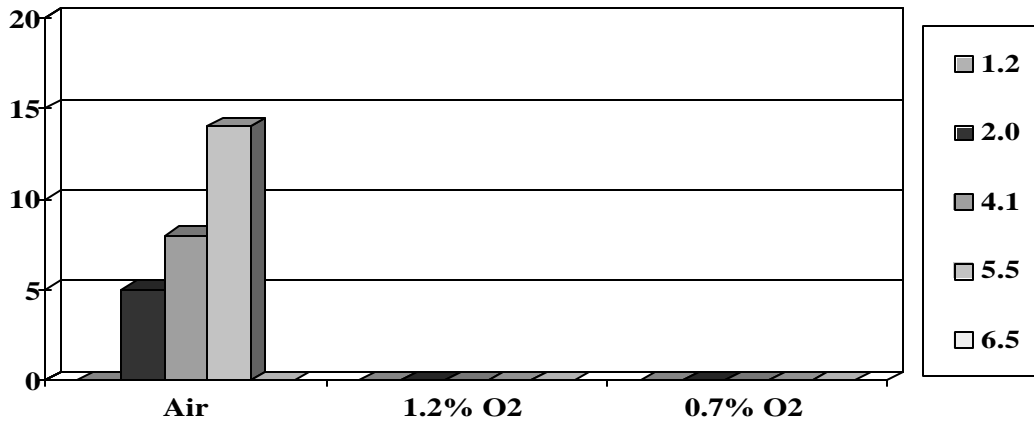
### Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 5-Jan-2000, Day-0)



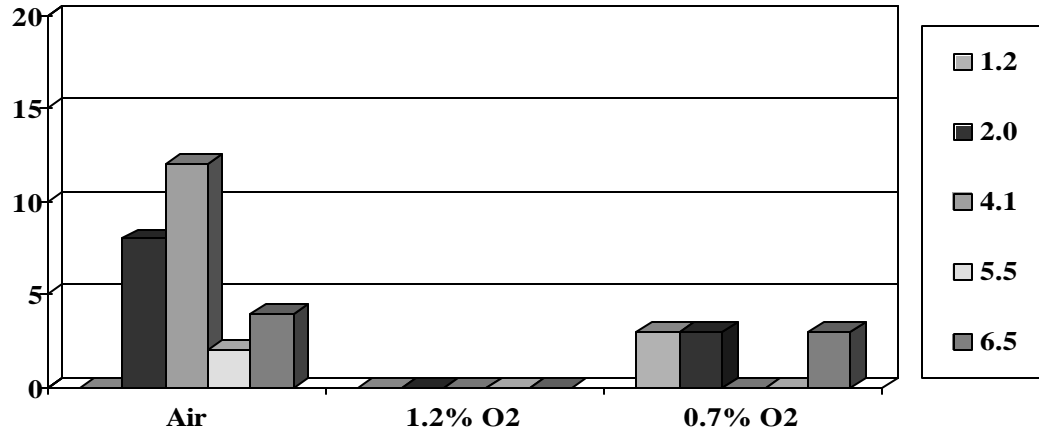
**Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> , 12-Jan-2000, Day-7)**



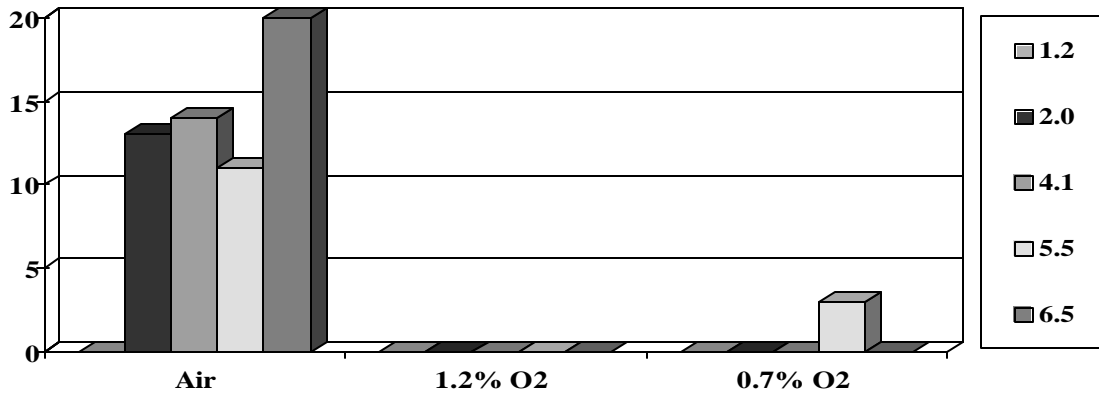
**Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub> 6-Apr-2000, Day-0)**



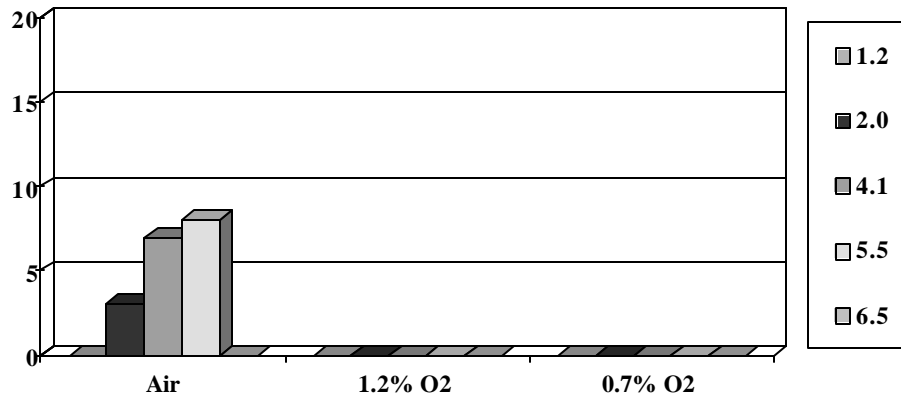
**Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 13-Apr-2000, Day-7)**



**Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 1-Jun-2000, Day-0)**



**Ambrosia Soft Scald (%) Maturity & Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 8-Jun-2000, Day-7)**



**Harvest maturity & CA storage**

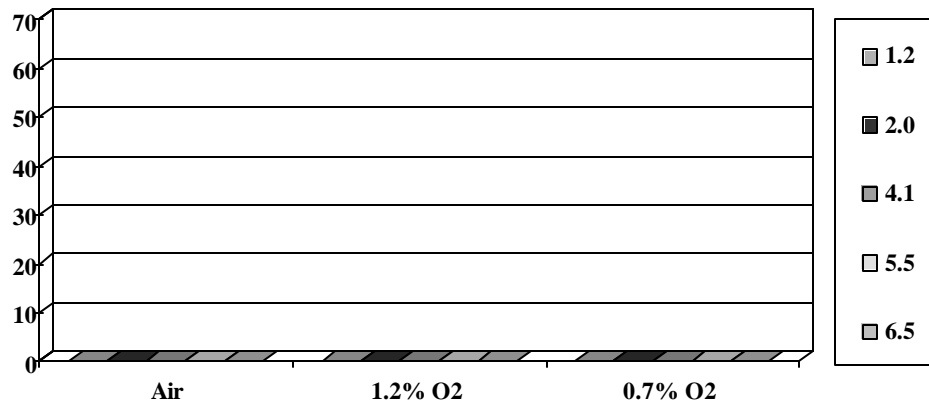
Core flush

Not a problem in 1994-96

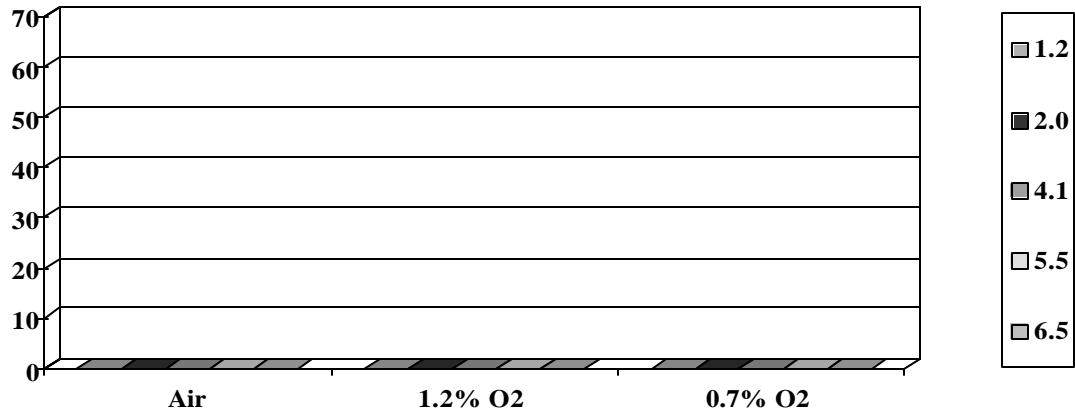
High incidence in air-stored fruit in 1999 (cool summer)

Reduced by storage in CA

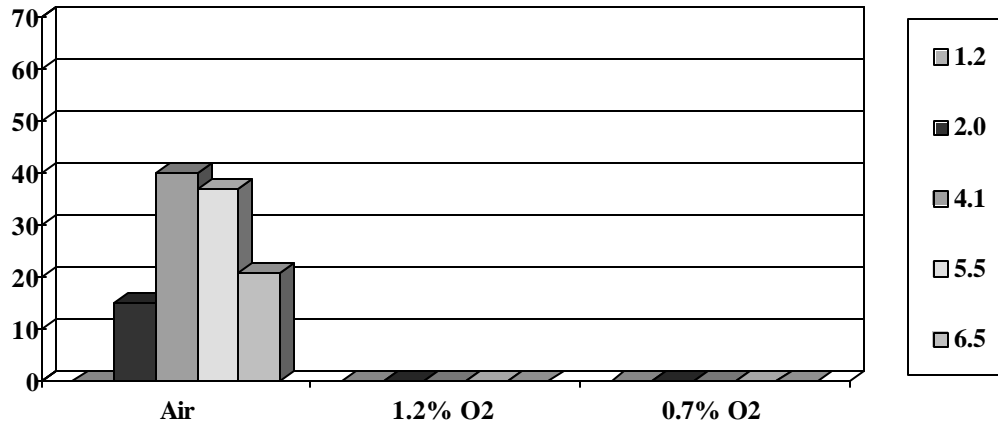
**Ambrosia Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub> ,  
5-Jan-2000, Day-0)**



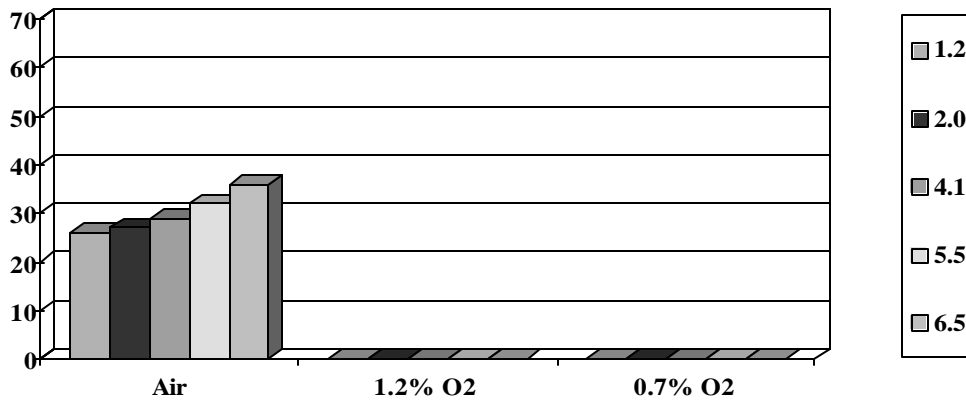
**Ambrosia Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub> ,  
12-Jan-2000, Day-7)**



**Ambrosi' Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub> ,  
6-Apr-2000, Day-0)**

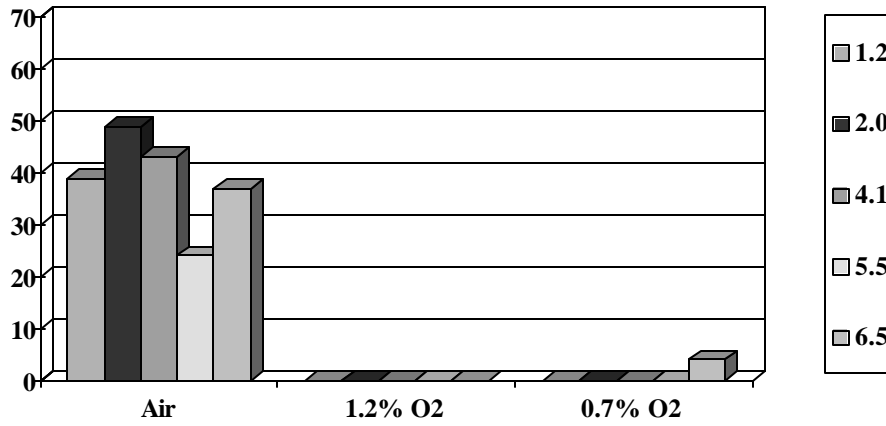


**Ambrosia Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub> ,  
13-Apr-2000, Day-7)**

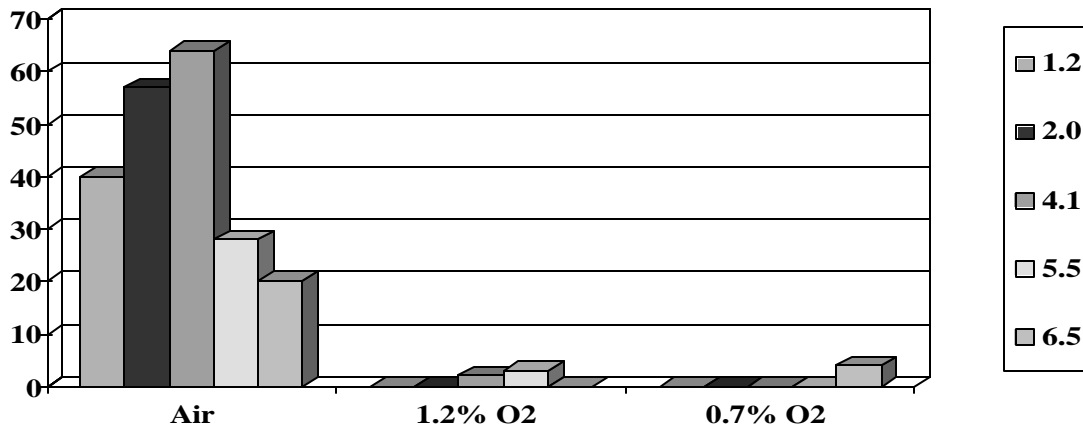




**Ambrosia Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 1-Jun-2000, Day-0)**



**Ambrosia Core flush (%) Air vs. CA (1.2%, 0.7% O<sub>2</sub>, 8-Jun-2000, Day-7)**



### **'Ambrosia': Storage Rots**

- 1994: 0-10% (Jan)      1995: 0-58% (Mar)
- 1996: 0-36% (Apr)      1999: 0-50% (Jun)
- Highest in late-picked fruit stored in 0°C air
- Control measures
  - Orchard sanitation
  - Correct harvest maturity
  - Calcium and fungicide applications
  - CA storage

### **Conclusions**

- Devise planting and marketing strategies
  - Growers
  - Packinghouses
  - Marketing agencies
- Pre- and post-harvest calcium treatments
- Pick fruit at the “desired” maturity
  - in relation to its intended marketing period
- Store 'Ambrosia' in CA

**Quality assurance: Correct nitrogen, maturity & CA storage**  
 ⇒ **Storage Life (1994-96, 1999)**

Starch	Clear	Air		CA	
		<u>Good till</u>	<u>Problems</u>	<u>Good till</u>	<u>Problems</u>
<u>1.5/wk</u>	<u>(%)</u>				
6.0	67	Oct/Nov	Bd,rt,so,a,f	Dec/Jan	Bd,rt,so
5.0	51	Nov/Dec	Bd,rt,so,a	Dec/Mar	Bd,rt
<b>4.0</b>	<b>38</b>	<b>Dec/Jan</b>	Bd,rt,so,a,f	<b>Jan/May</b>	Bd
<b>3.0</b>	<b>26</b>	<b>Jan</b>	Bd,rt	<b>Feb/Jun</b>	Bd
2.0	17	Jan/Feb	Bd,color	Jun	Color

*Reference*

- Lau, O.L. 2000. Correct harvest maturity and controlled atmosphere storage increase storage potential of 'Ambrosia' apples -- 1994, 1995, 1996 and 1999 assessment. OFSA Technical Report, 25 Aug 2000. 26 pages.



# Benchmark Research Inc.

## BC Tree Fruits

### **A Marketing Study on the Potential for the Ambrosia Apple Variety**

By Allan Koebel

January 17, 2001

#### **Research Objective:**

To understand consumer preferences and opinions regarding the Ambrosia variety that would:

- determine whether the variety is viable within the BC marketplace, and
- assist in the success of marketing efforts

#### **Data Collection Methodology:**

In-store tastings/surveys (257 returned surveys)

Focus groups (2 groups of 10 consumers)

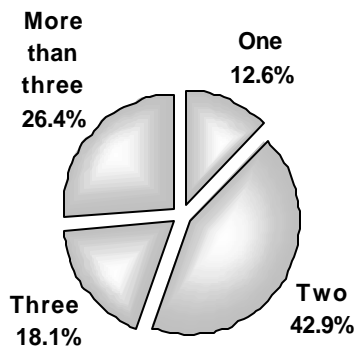
benchmark

RESEARCH INCORPORATED

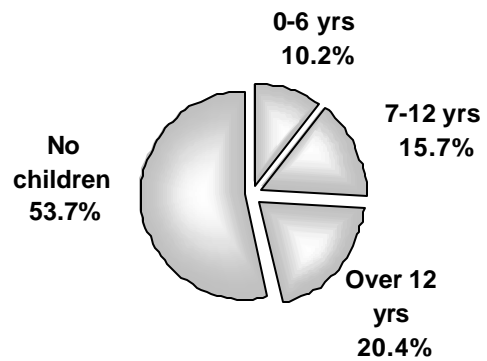


**Survey Respondents:**

**Number of Persons/Household**

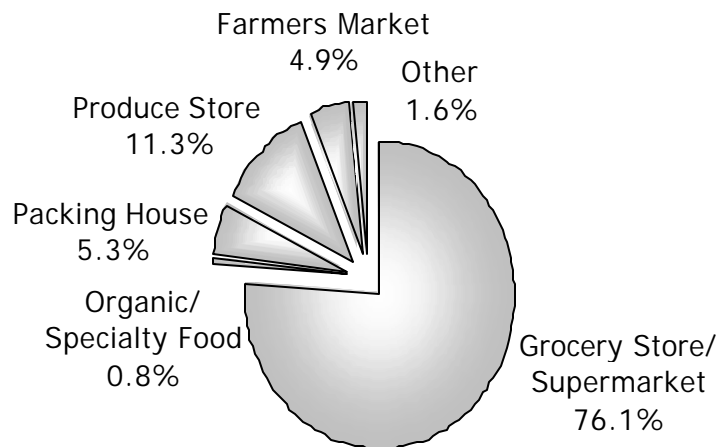


**Children Age ranges**



**Purchasing Habits**

**Location of Apple Purchases**

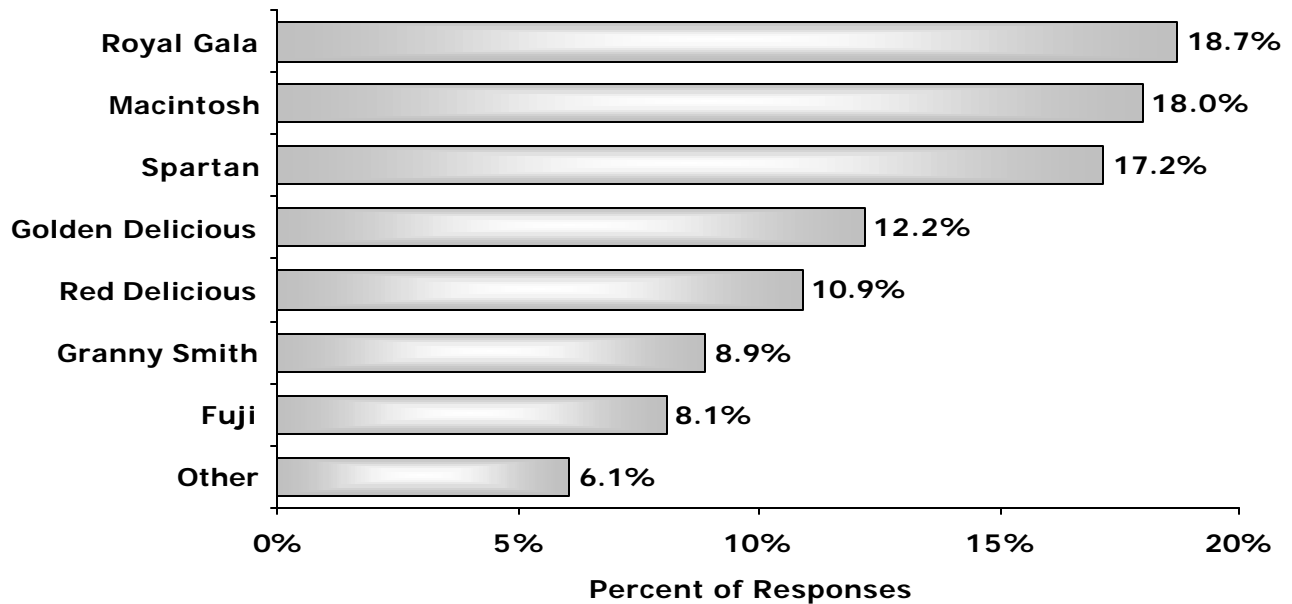


- Over half (56%) purchased apples once per week
- Only 19% buy the same variety all the time (Royal Gala most commonly)



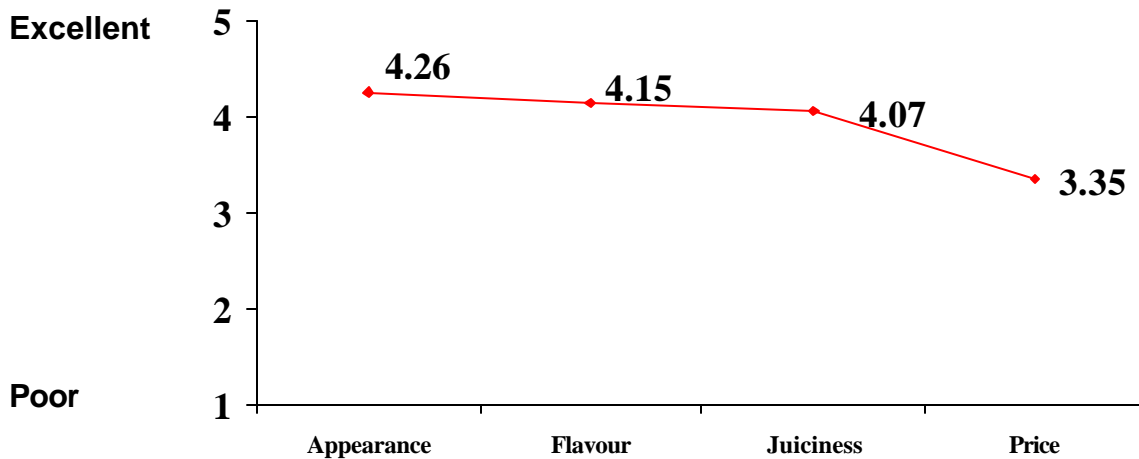
**Purchasing Habits**

**Varieties Most Commonly Purchased**



**Ambrosia Feedback**

**Average Ratings Compared to Regularly Purchased Variety**

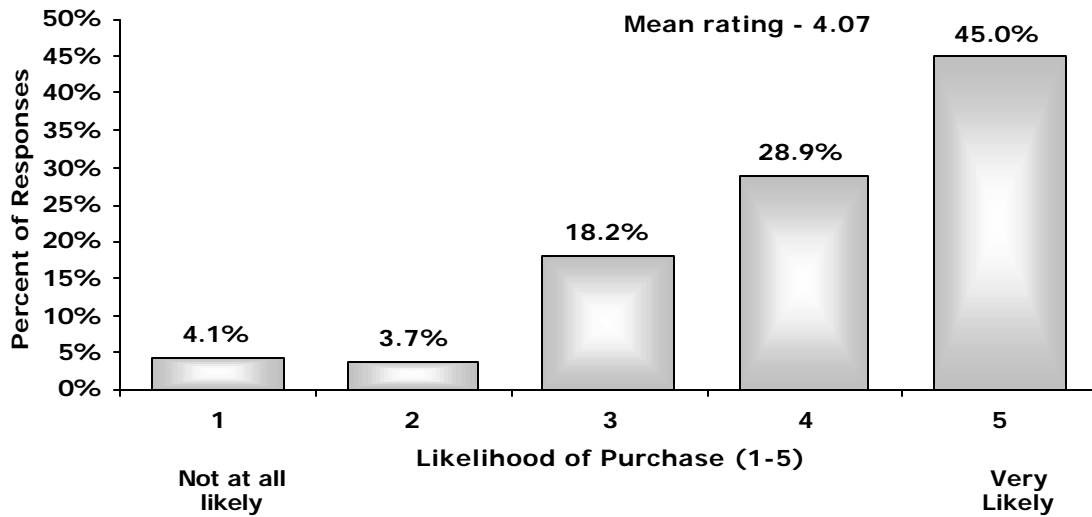


Excellent ratings: Appearance - 48%, Flavour - 42%,  
Juiciness - 34%, Price - 16%



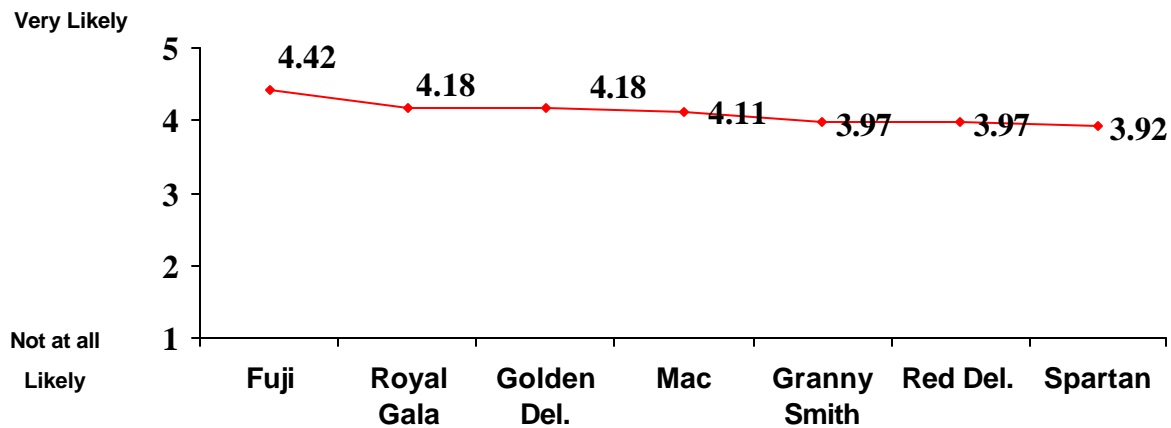
**Ambrosia Feedback**

**Likelihood of Purchase**



**Ambrosia Feedback**

**Likelihood of Purchase - Average Rating**



Fuji buyers most likely, Spartan buyers least likely, to purchase Ambrosia variety.

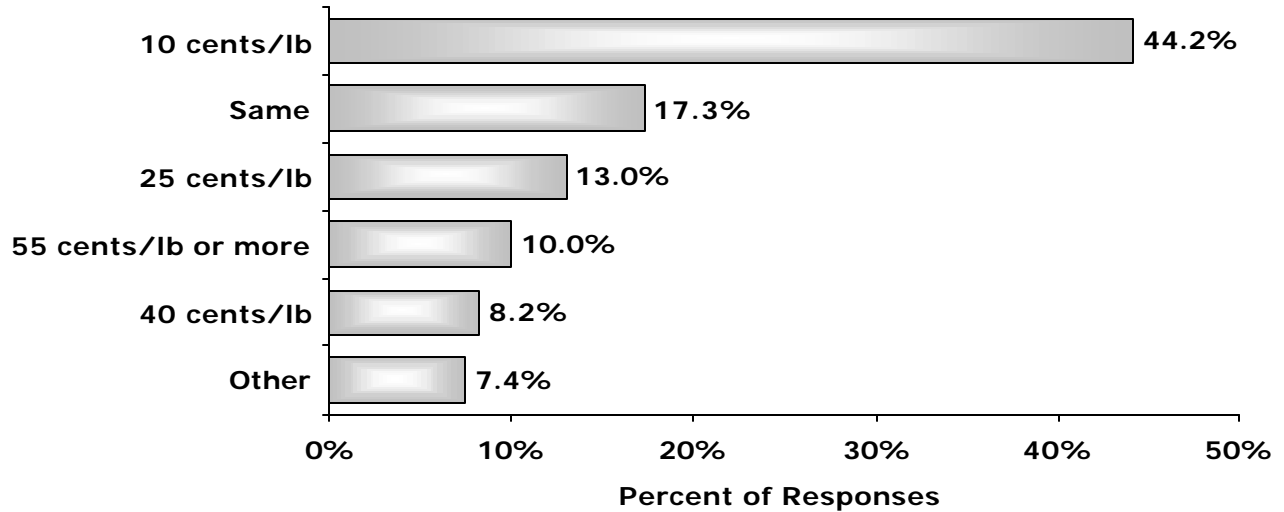


RESEARCH INCORPORATED



**Ambrosia Pricing**

**Reasonable Premium over Current Variety**

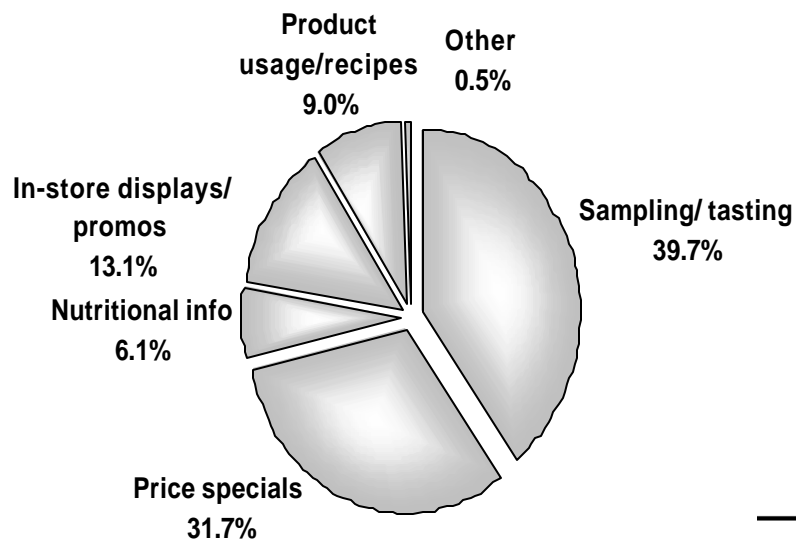


On average, \$0.18/lb. Premium

Spartan buyers - \$0.23/lb.      Royal Gala buyers - \$0.17/lb.

**Ambrosia Marketing**

**Methods for Promoting Ambrosia Variety in Supermarkets**

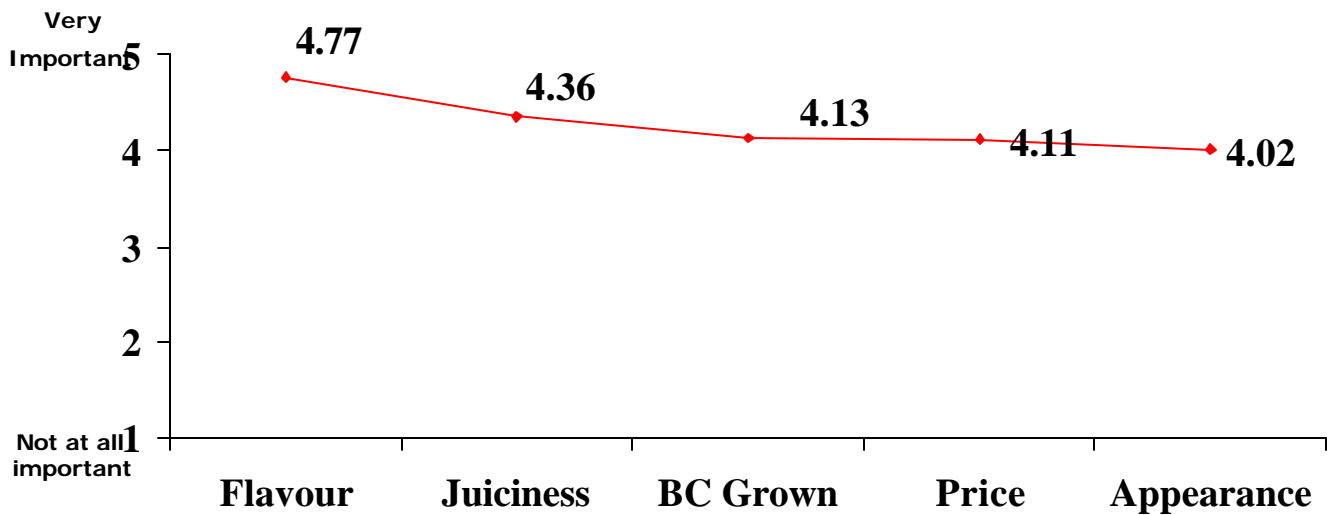






**Ambrosia Marketing**

**Factors in Choosing an Apple**



Demo price (\$0.99/lb.) was rated as 3 or higher by 80% of those who identified price as being a 'very important' attribute in choosing an apple.

**Marketing Considerations**

- Open to trying new varieties (76% do not purchase same variety all the time).
- Ambrosia rated highly on all factors (including those determined as important in selecting an apple).
- In-store tastings/samplings along with price specials identified as effective marketing tools.
- Pricing accepted as a premium variety (\$1.00-\$1.20/lb.)

# **AMBROSIA POSTHARVEST QUALITY**

by Bill Wolk, Maturity Specialist  
Okanagan Similkameen Cooperative, Oliver

## **Ambrosia Storage Disorders**

- Calyx bowl splitting
- Internal breakdown
- Soft scald

## **Calyx Bowl Splitting**

### ***Possibly related to:***

- Advanced maturity (?)
- Large fruit size (?)
- Other unknown factors (?)

## **Ambrosia Calyx Bowl Split**



### Ambrosia Calyx Bowl Split

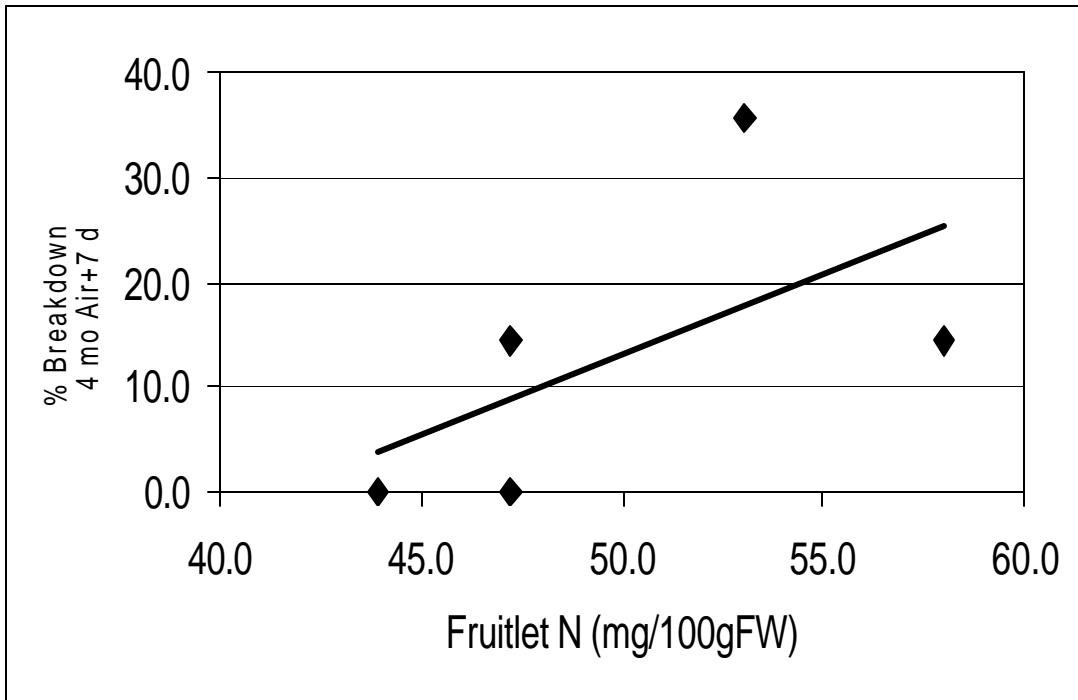


### Internal Breakdown

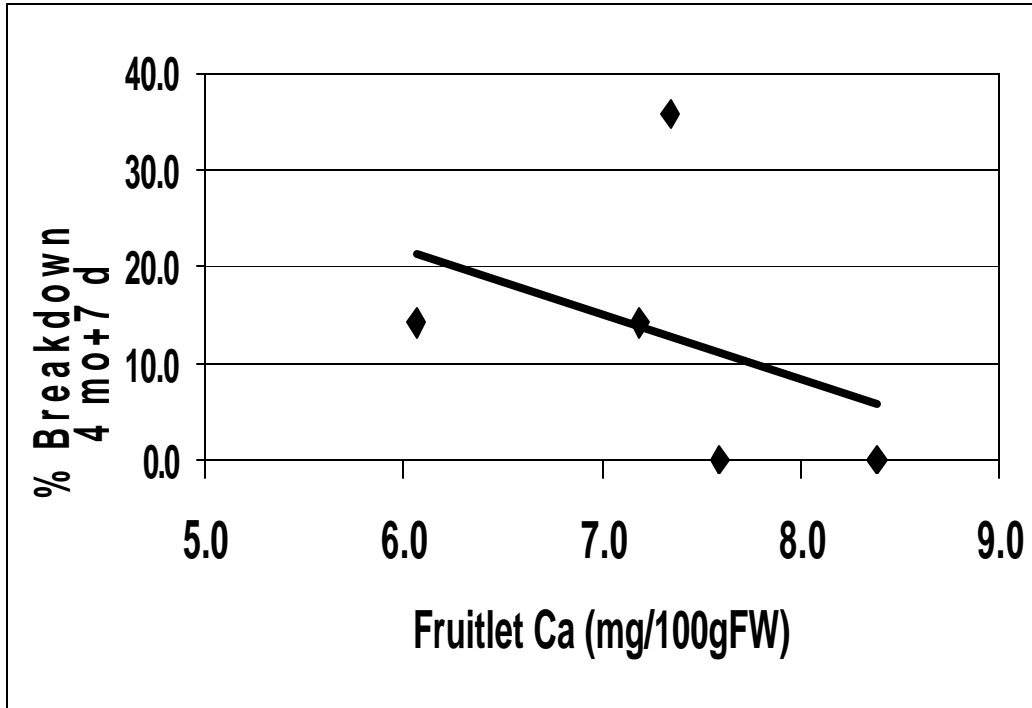
***Often related with:***

- Advanced harvest maturity
- Low fruit calcium
- High fruit nitrogen
- High fruit potassium

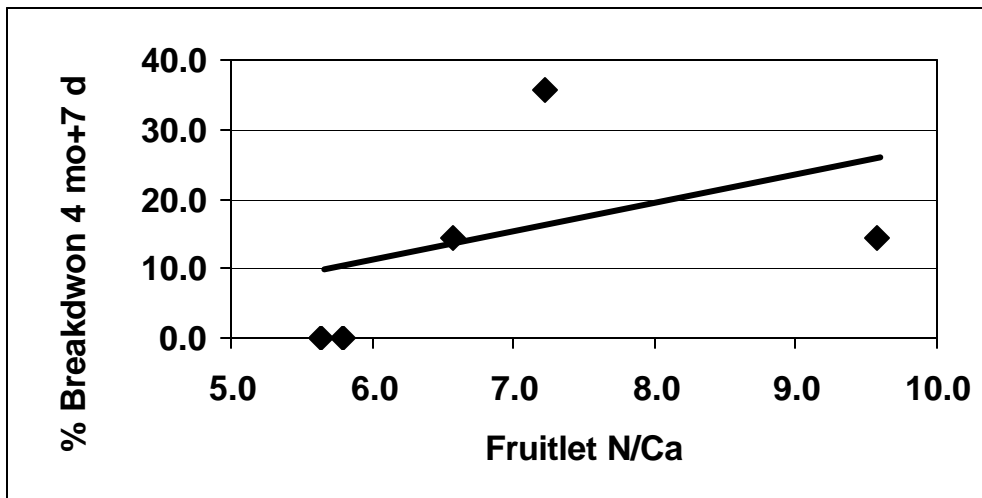
### 1999 Ambrosia N vs. Breakdown



1999 Ambrosia Ca vs. Breakdown



1999 Ambrosia Breakdown vs. N/Ca



## Soft Scald

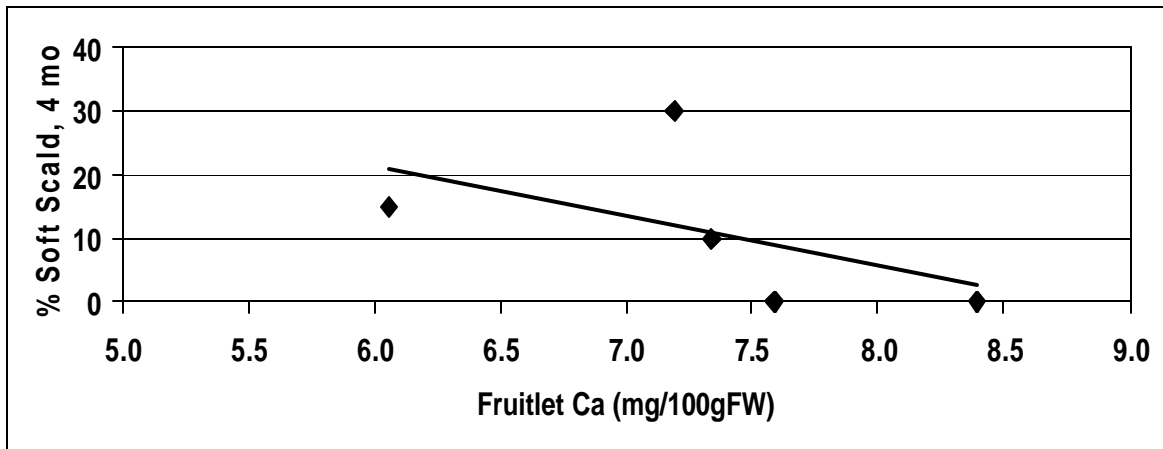
### *Often related with:*

- Low storage temperature
- Advanced harvest maturity
- Delay in getting harvested fruit into storage

### Soft Scald on Ambrosia



### 1999 Ambrosia Ca vs. Soft Scald

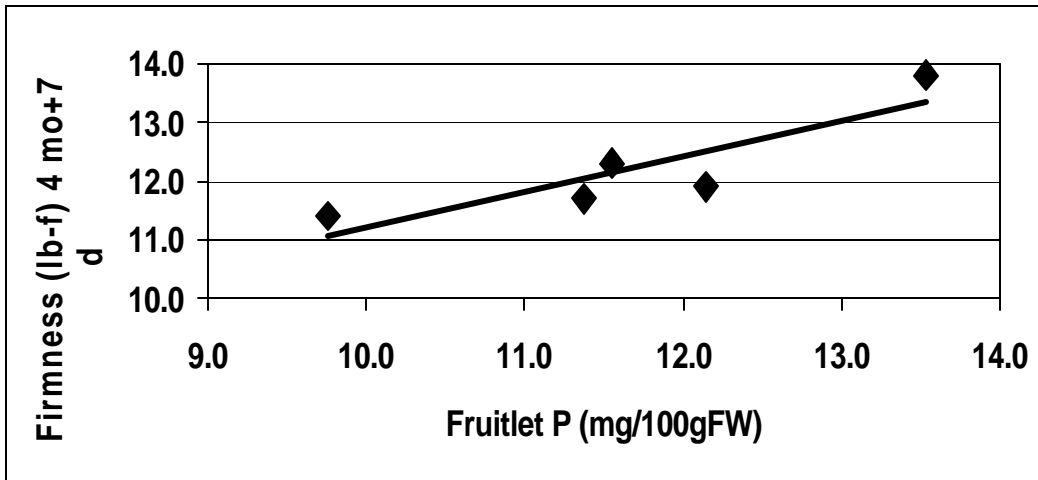


### Fruit Firmness

*Often related to:*

- Harvest maturity
- Fruit mineral profile
- Fruit size

### 1999 Ambrosia P vs. Firmness



### Summary

#### **Calyx bowl splitting**

Possibly maturity related (?)

#### **Internal breakdown**

Remedy by high Ca, lower N and harvesting at correct maturity

#### **Soft Scald**

*Grower* - High Ca fruit, harvest at proper maturity

*Storage operator* - Prompt storage of fruit, awareness of fruit maturity and potential for soft scald

### Acknowledgements

- Okanagan Similkameen Co-op
- Rita Yastremski
- Westbank Packers
- Cawston Cold Storage

# **SUMMARY**

By Wendy Couriard, PICO

## **AMBROSIA WORKSHOP – JANUARY 23, 2000 PACIFIC AGRI-FOOD RESEARCH CENTRE**

### **STAN SWALES – OKANAGAN NORTH PACKERS (VERNON)**

Comments:

- ◆ experience limited with Ambrosia in the north
- ◆ harvest time is critical
- ◆ moves quickly like a summer apple
- ◆ colour doesn't change after a point
- ◆ shows bruises and loses flavour if not harvested at the right time
- ◆ double picking is an advantage – the second pick follows 5 or 6 days later
- ◆ does not recommend using colour or sugar as indicators for maturity

### **BRIAN MENNELL**

Comments:

- ◆ Mr. Mennell is an organic grower
- ◆ tries to sell his fruit by March –tries to avoid CA storage by selling into the fresh fruit market
- ◆ Gala is a 365-day apple and it is now considered “common” – he hopes Ambrosia does not suffer the same fate
- ◆ when planting, growers should check their peat for pathogenic fungal spores which cause root and crown rots
- ◆ experience with blind wood tells him it is possibly related to summer heat
- ◆ experience with splitting of the calyx mostly occurred off the main stem to apples pointing towards the west with the calyx facing up (early September)
- ◆ recommends picking when green colour disappears from the calyx
- ◆ Ambrosia apples with a Jonagold appearance seem to be a result of excess Nitrogen

### **WILFRID MENNELL**

Comments:

- ◆ the main purpose of the meeting is to promote quality assurance
- ◆ the inconsistency of quality that was observed in 2000 is a concern – this could have been a result of overcropping or one-pick harvesting
- ◆ 2000 fruit was sometimes small, low colour, and of varied maturity
- ◆ growers should not permit a product of low quality into the marketplace
- ◆ if there are problems growers should seek advice from experienced growers

### **WENDY COURIARD**

Comments:

- ◆ exclusivity means nothing without promotion and marketing
- ◆ this is an opportunity for BC growers and it is up to them
- ◆ those who are interested may sign up to be part of an Ambrosia Steering Committee which will determine what action will be taken



## **DISCUSSION - FACTORS TO CONSIDER**

**By Jim Campbell, Prov. Tree Fruit Specialist, BCMAFF**

- Fragmented Industry
- Competition with other new varieties
- Need more industry funding for promotion
- Need organization for variety promotion
- Consolidation of wholesalers/retailers
- Industry needs new focus
- Ambrosia growers need to lead any promotion initiative
- Matching govt funding available
- Quality standards need to be set

### **THE COMPETITION**

- Pink Lady
- Cameo
- Honeycrisp
- Many Other New Varieties

### **NEED FOR PROMOTION**

- Rapid increase in planting
- Resistance to any new varieties by wholesalers
- Consumers need to know the variety
- Consumers appear to be willing to pay more once they have tasted the variety
- Other areas not promoting Ambrosia

### **OPTIONS TO CONSIDER**

- Ambrosia Development Council (Farming and Fishing Industries Development Act)
- Cooperative among Ambrosia growers
- Association of Ambrosia growers
- Let things happen option

## **CONCLUSIONS**

- Agreement from meeting to pursue some options regarding an organization to promote and develop the Ambrosia variety
- Promotion, variety development, and quality standards were seen as the primary focus
- A volunteer steering committee was appointed by the meeting that would report back to another general grower meeting

# **THE FARMING AND FISHING DEVELOPMENT ACT**

## **INTRODUCTION**

### **CHAPTER ONE**

In today's rapidly changing and competitive global economy, commodity producers in British Columbia have felt the need to take a lead role in the development of their industries. The Farming and Fishing Industries Development Act (FFIDA) is one way the Ministry of Agriculture, Fisheries and Food (MAFF) is responding to that need. The FFIDA enables producer groups to benefit and promote their industry by creating funds from a self-imposed levy on their commodity. All producers pay the levy, which is usually collected by the first receiver of the product.

Each fund is managed by a Commodity Development Council established by the Minister under the Act. The council is composed of representatives from throughout the relevant industry, but a majority are always primary producers. The council is charged with implementing the policy of the FFIDA.

A council has a high level of autonomy which is balanced by certain requirements of accountability, operating where the legislative and ministry policy and the satisfaction of specified regulatory requirements. This accountability is designed to ensure the funds are managed in a fashion that is open to scrutiny and control of producers and the general public. Except for some general supervision by government, the levy fund is entirely controlled by the council. The monies raised by the payment of levies is spent at the council's discretion. If the council is accountable and responsive to its industry and conducts itself in an open and fair manner, there is more likelihood the producer groups will be satisfied with its work.

The council determines the amount of the levy, and a provincial government regulation then brings it into effect. Thus, the regulation making process requires that the levy be reviewed by Cabinet. When that happens, all producers of that particular commodity become legally obliged to pay the levy, unless they are specifically exempted.

To establish a council, a producer group must develop a plan which addresses how the council will be established and how the fund will operate.

The plan must be submitted to and approved by the Minister before it is offered to the industry for ratification in a plebiscite. The Minister is charged by the legislation to ensure producers support the plan. To fulfill this mandate, the Minister insists that all producers are offered the opportunity to first understand the purpose and use of the levy, and then vote on implementing it.

## **The Purpose of the FFIDA**

The purpose of the FFIDA is to allow commodity groups to establish a self-levy system for market promotion, market development, research and other development purposes. It is not designed to fund commodity associations, although industry organizations and associations may receive funding from councils. For example, a council could approve the granting of funds to an organization for work done legitimately on behalf of the council. This work might be in the nature of a developmental project or the administrative services needed to support such projects. This use of council funds must reflect the needs of the entire sector and must meet that requirement of the FFIDA.

The legislation established through a separate regulation for each council, the legal mechanism to support the levy collection system. The regulation also ensure proper management, use and accountability for the funds by the council. The regulation describes the commodity(s), whether the levy system is refundable or non-refundable, the amount of the levy and the collection system that is to be used.

Broad support for the levy system at an early stage often forestalls collection problems later on which enables the council to focus on development work rather than levy enforcement.

The act states that the council shall be comprised of a majority of producer member. However, it is also important that council recognize what is in the best interest of the industry as a whole and to serve that common interest through the council's development work and the operation of its fund. Government recognizes that each industry is unique and at a different stage of development. The FFIDA is enabling legislation. This means the statute gives councils the power and authority to do the development work their members choose. It reflects the government's desire to design permissive and flexible systems that can be adapted to best suit the needs of a group of producers.

MAFF welcomes your comments and suggestions at any time with regard to this goal.

## **Using This Manual**

Part one of this manual is intended to guide you through the process of starting your Commodity Development Council. Part two will help guide its operation once you are up and running.

Not all portions of these guidelines will apply in every situation although the aim of the guidelines is to answer questions and concerns about the FFIDA. However, the guidelines may not provide instant answers, and they should not be seen as a substitute for full consideration of any issues and problems encountered by your council.

## STARTING A COUNCIL

### CHAPTER TWO

#### **Step One: Gathering Information**

Get acquainted with the legislation, a sample regulation and this manual, it may be helpful to organize an information session with a ministry representative. The ministry representative will be able to discuss the act, regulations and ministry policy regarding administration councils under the FFIDA. This person will be able to answer your questions, and point out the successes and challenges of other councils.

It may also be useful to contact a general manager, chair or other officer of an existing council - especially if that industry is structured somewhat like your own. The ministry representative can advise you of useful contacts within other councils whom you may wish to contact.

It is extremely important to compile and retain sufficient information about the industry at this stage, this information will be a valuable resource throughout the process of creating and administering an FFIDA council. This information may also be of primary importance in the crucial decision of whether or not to proceed with establishing an FFIDA council.

#### **Step Two: Establish a Steering Committee**

Establish a steering committee to lead the industry in taking the critical steps necessary to establish a council, fund and levy.

Consider asking all key partners in the industry to join the committee. Possible partners include the processing and distribution sectors, marketing specialists as well as the ministry. When all sectors of the industry work together a more effective levy system is developed. This benefits the producers which in turn benefits the other sectors.

Again, personnel from functioning councils can help at this stage. Their experience in organizing a levy scheme may assist the steering committee in its decisions.

#### **Step Three: Evaluate the Information**

Before embarking on the plan, spend some time taking stock of your industry. What are its long-term prospects? Its current strengths and weaknesses? What opportunities and threats does it face? In addition, at this stage some preliminary financial evaluation should take place. The steering committee should undertake preliminary estimates of the amount of potential income that could be generated, the costs of operating a council and the amount of revenue that would remain available to apply to beneficial projects of the council. This information not only helps focus your development plan, it can also help guide your council's activities once it is in operation.

#### **Step Four: Begin the Development Plan**

The contents of the development plan will be covered in more detail on the following pages, and a sample outline is attached as Appendix B.

#### **Step Five: Send Producers an Information Package**

Good communication will be essential to the success of your Council, so start right at the beginning. Introduce producers to the concept, let them know what the steering committee has accomplished, and send them a summary of the proposed plan. Be sure they understand they will be able to vote on the levy, and provide them with addresses and phone numbers for contact people who can answer their questions. It is advisable to liaise with your ministry representative at this stage to ensure that all relevant issues are covered in the information package to be mailed to producers.

#### **Step Six: Send the Development Plan to the Minister**

The Minister must approve the development plan before the steering committee takes it to producers for a vote. Ministry staff will review the proposed plan and make sure it covers all the basic elements and areas of concern to the Minister. This will allow the Minister to address any questions or issues arising from the Plan in advance of the plebiscite.

#### **Step Seven: Conduct the Plebiscite**

Like any election, the levy plebiscite must be seen as fair and open. All producers must get complete and unbiased information on the implications of the vote, and sufficient time to consider it. Finally, the results must show conclusive support for the levy and plan. Since money is involved, this may mean more than a simple majority will be required to indicate producer support for the initiative (Use "Conducting the Plebiscite" on page 8).

#### **Step Eight: Minister Creates the Council and Fund**

#### **Step Nine: Enacting the Regulations**

The levy collection system must be approved by an order of the Lieutenant Governor in Council. This regulation is prepared under the direction of the industry by the Ministry of Attorney General. Input from the council will be required in order to prepare and review the policy to be set by this regulation.

## **THE DEVELOPMENT PLAN IN DETAIL**

### **CHAPTER THREE**

#### **The Development Plan – Basic Elements**

- a description of the industry and who will be covered by the levy system;
- how the group plans to inform its members of the FFIDA, the council, fund and levy;
- how voting support for the idea will be measured;
- the initial purpose and size of the levy;
- method of collecting the levy;
- whether or not the levy will be refundable; and
- the composition of the council and how its members will be selected—by election or by appointment of the Minister.

Obviously, the development plan and plebiscite are central to the formation of a Council, so let's take a more detailed look at those steps in the start-up process. A sample outline for a development plan is also included as Appendix B. It can be used as a quick check-list to ensure your plan covers all the areas of concern to the Minister.

#### **Describe the Industry and its Needs**

In preparing the development plan, it is good to begin with a description of how the industry is organized.

What product(s) does it produce? How are they processed and distributed? Are products packaged/processed on or off the farm? Who purchases the product from the producer?

Some brief background on other industry organizations, if any, and their history would also be useful - anything that will provide information about the structure of the industry, its products and how it has evolved up to now.

This description should apply to any and all commodities the plan is intended to cover.

#### **Describe Industry Marketing and Development**

Describe the marketing process for the subject commodity(ies). This "Market Profile" should address the following questions:

##### **What are the Present Marketing Channels?**

What changes does the present marketing system need to access more or better markets?

##### **Current Research:**

What are the sources of marketing strategies for the industry? Where is research and development work carried out and how does the industry learn of it?

**Promotion:**

How does the consumer learn about this commodity? What does the industry need in those areas?

In the steering committee's opinion, what areas of marketing and research need development work? What is the industry's current outlook for research and market development and how do you think a council will improve the outlook?

**Potential Application of the Levy**

Under the FFIDA legislation, levy funds are set up to promote the levied product, to conduct or support research and educational projects that benefit the industry and to pay the Council's administrative expenses. How do you think you will apply that general purpose to your particular industry? What areas would you like to focus on at first?

Will the council use the levy for market, genetic or production research? What about the transfer of technology or other research?

Will it spend time identifying new or existing opportunities or improving market share? What about export markets?

Will it promote the consumption of the commodity, educate a segment of the public or concern itself with food safety issues? Will it call for proposals and/or try to find partners for certain projects?

**Design of the Levy Collection System****Basic design:**

It is important to give some thought to the amount of the levy at an early stage and describe this in the plan. Key issues to consider in determining the design of the levy collection system include what type of projects would the council wish to undertake? How much revenue will be needed to achieve the council's objectives?

Additional factors to consider in determining the amount of the levy include: How is the selling price of the commodity determined? How and when do prices range for the commodity? What variables affect the price?

It may be appropriate to establish classes of levies. This depends on whether the plan covers one commodity or several, and the manner in which the commodity is sold. What commodities are to be levied under the plan and which producers will be affected by it? Will there be different classes of levies? If so, describe them.

**Collecting the Levy**

Successful collection of the levy depends on a well-planned and understood collection system. The steering committee should consider the following questions and provide details of the proposed collection system in their plan.



Given the established marketing channels of the industry, what would be the sensible point of collection of the levy? Should it be the primary producer, first receiver or someone else in the distribution chain?

Will the collectors need any form of help to facilitate collection? The Act allows levy collectors to charge a commission to cover their administrative costs: Is a commission appropriate and if so, what is a reasonable amount to pay the collectors?

**TO REFUND OR NOT TO REFUND**

Under a refundable levy system producers who apply for an annual refund by January 31 can have their levy returned to them. The producer is not required to justify the refund request. If producers support a non-refundable levy then no refund applications can be made or accepted.

<b><i>Refundable Levies:</i></b>	
<b>PRO</b>	<b>CON</b>
<ul style="list-style-type: none"> <li>• easier to obtain maintain support</li> <li>• Freedom of choice</li> </ul> <p>Refund requests are a measure of producer satisfaction with Council's fund management</p>	<ul style="list-style-type: none"> <li>• Total amount of funds available is unpredictable</li> <li>• Requires a contingency reserve</li> <li>• Requires extra administrative work to process refunds</li> </ul>
<b><i>Non-refundable Levies:</i></b>	
<ul style="list-style-type: none"> <li>• Levy funds remain predictable and accessible</li> <li>• Less administration</li> <li>• Creates a stable climate for planned use of industry funds</li> <li>• maintains equality amongst producers</li> </ul>	<ul style="list-style-type: none"> <li>• No direct indication of whether producers feel the fund is of value to them</li> <li>• Producers may feel this infringes on their freedom of choice</li> </ul>

## DESIGN OF THE COUNCIL

### CHAPTER FOUR

#### ***Member representation:***

FFIDA permits a council to be composed of:

- one or more ministry representatives;
- 
- enough producers to constitute a majority  
other persons representing suppliers, processors, distributors or consumers.

In most cases, there will only be one ministry representative.

In addition to the key players and partners considered above, are there any other groups with divergent views which should be brought to the table? Have all regions been represented? How will you recruit traditionally under-represented members of the industry, including women and minorities? Are there individuals with special interests or skills that would be valuable to the council?

#### ***Key Players and Partners:***

A strong Council will include representatives from all sectors of the industry and recognize their contribution to it. Diverse representation will ensure broad support. The plan should describe the key partners and their roles in the industry.

Have representatives of the other sectors consulted expressed support for the producer levy? Have all of their concerns been addressed in the plan? What other government or non-government agencies have been contacted? Will these agencies continue their involvement or will they be advisors at the development stage only? Is there a possibility of technical or financial cooperation?

Interestingly, some FFIDA councils have attracted funding from other sources. MAFF has been told that the reason for this is that the councils are viewed as non-partisan organizations and representative of the entire industry.

#### ***Size:***

The number of members appointed to the council will likely be influenced by how the industry is organized. The Minister would like to have producers' recommendations on this issue.

How many sectors or "interests" are present in the industry?

Experience has shown that a very large complex industry with, for example, a thousand or more producers, may need a larger number (10-15) of members to represent all the sectors and interests operating in the industry. If a commodity group has 100 or fewer producers then a council of five or six members may be effective in bringing all the issues to the table. Cost of bringing individuals together is borne from levy funds and this may be significant in some cases.

### ***Elected or appointed Council:***

Producer members may be elected or appointed to Councils, or the Council can be composed of both elected and appointed members. Generally, appointments would be made by the Minister on the basis of recommendations from industry. The proposed method of selection should be part of the development plan submitted to producers in the plebiscite that establishes the Council.

Section 2(5) of the Act provides that where the producers and the Minister agree on a plan for electing producer members of the council, the Minister must comply with the election results in forming the council.

Alternatively, the steering committee may find that current issues and challenges facing the industry favour an appointed council at the outset. This does not necessarily preclude changing to elections when the levy system has matured.

In determining what selection method to recommend, a steering committee might also consider:

- whether the industry infrastructure lends itself to an election process; and
- how difficult the industry will be to mobilize for a vote.

Where elections are established, the Minister invites producers to recommend persons for the non-producer positions on the council.

Whatever the selection process, the council should fairly represent the constituency it serves from a sectoral, social and, if appropriate, regional perspective.

## **THE PLEBISCITE**

### **CHAPTER FIVE**

#### **Communications and Consultations :**

Clearly, the steering committee will be working in consultation with producers and other players in the industry throughout the planning process. When the time comes to hold a producer plebiscite on the proposal, a plan that “drops from the sky” stands little chance of success.

What is the best way to present the levy proposals to producers in your industry? How will the idea be explained? Is the industry small enough and central enough that a townhall meeting can be held to discuss the issues? Can producer associations help in reaching all producers? Has an information package been mailed out to producers? Is follow-up to the information package required? Are there other scheduled industry meetings at which the topic can be discussed?

It may be useful to have one or more meetings with a cross-section of producers and other stakeholders, to explain the initiative, share ideas, and obtain a preliminary indication of the level of support for various components of the plan. Feedback from these meetings can then be used to “fine tune” the plan before it is submitted to the Minister and put to a vote. An account of these consultations and any others planned for the future, should be included in the overall development plan.

### **The Polling Plan**

Finally, the plan should indicate to the Minister how producers will be polled to determine support for the creation of the council.

What is the proposed date of the plebiscite? How much before that date will an information package be sent to producers? Does your time line provide producers with enough notice to study the levy proposal, make inquiries about it and discuss it with colleagues? Does it provide a forum for these questions and discussions - either on paper or in meetings?

How will the vote be taken? Is your industry small and centralized enough that a meeting could be held for the vote, or will it require a mail ballot?

If the vote is taken by mail, who will tally the results? If taken at a meeting, will the results be by silent ballot or show of hands? Who will verify the results of a vote taken at a meeting? What will constitute a “Yes” vote? Since all producers are legally obliged to pay the levy once it is established, it should be supported by more than a simple majority of those voting. In determining an acceptable level of support, the plan should set targets in each of the following areas:

- percentage of producers voting (“voter turnout”)
- percentage of votes in favour
- percentage of the industry’s total production volume represented by the votes in favour

These targets should be set in close consultation with the ministry staff so that the industry may be confident that the results will derive a level of consensus of satisfaction to the minister to endorse the establishment of a council. For more details on the vote see “Conducting the Plebiscite,” below.

## **Report to the Minister**

Before conducting the plebiscite, the steering committee sends the development plan to the Minister. Ministry staff will check to see that all the basic elements are in place and all the questions raised in the preceding pages (Nos. 1-8) have been answered to the Minister's satisfaction.

## **Prior Communication**

The Farming and Fishing Industries Development Act says the Minister must be satisfied there is producer support for the creation of a council and a fund. The Minister will want to be satisfied:

- 1) that the process by which producers had the proposals explained to them was clear;
- 2) that the method used for producers to voice their support for the system was open and democratic.

The polling process, therefore, includes not only the plebiscite itself, but the publicity and discussion leading up to it. It will be judged not only by the results of the vote, but by the quality of the information producers have received, and on which they base their decision. Producers must be given a full explanation of the levy system and have ample opportunity to ask questions and voice concerns before it goes to a vote.

## **The Plebiscite**

Once the steering committee receives the Minister's approval of the development plan, they can proceed with the plebiscite.

Again, a full and objective description of the meaning of the proposals is crucial to a fair vote. So is adequate notice. Give producers plenty of time to consider the proposals and get answers to any remaining questions.

All producers of the product must be reached with information and ballots since once the levy is established it applies to all producers.

Organizers must be able to guarantee the plebiscite was fairly and impartially implemented. To avoid actual bias or unfairness or any appearance of bias or unfairness in tabulating the results, organizers may consider hiring an impartial third party to conduct the vote tally.

## **Multi-Commodity Councils**

When a number of commodity groups wish to form a council, additional communication and co-ordination will be required. Costs may be greater, but it remains vital in these cases that all producers be informed of the proposals and given an opportunity to vote. Extra measures may include the placement of posters or bulletins in locations where producers are likely to read them. Steering committees proposing multi-commodity

councils should pay particular attention to their communications strategy when drafting their development plan for the Minister.

### **The Vote and Its Outcome**

The vote to establish a council and levy system can be taken by a show of hands, a secret ballot or a mail-in ballot. The appropriate form will depend on the size and geographic distribution of your industry.

In the case of a mail-in ballot, it may be advisable to include a self-addressed return envelope to increase the participation rate. Some mail-in votes also include a special ballot envelope which is sealed and placed in the return envelope to ensure confidentiality.

Once the vote is conducted, both producers and the Minister must be satisfied that it was fair and open, that results were properly tallied and that imposing a levy on all producers is now democratically justified.

### **Democratically Justified**

This may mean different things in different industries. In some cases, yes votes may need to represent a significant percentage of the total production volume as well as numerical support from a majority of producers.

For example:

Recently an industry of about 4,000 producers opted for a mail-in ballot. To consider the vote statistically fair, the steering committee decided at least 40% of the ballots should be returned unspoiled.

Of the returned ballots, if 65% representing 51% of the total volume voted in favour, this was considered a democratically justified result. In fact, the yes votes exceeded that test and the council was formed.

In another case, where producers were voting on a non-refundable levy system, an overall return rate of 65% was required. Since the producers would lose their right to a refund if the measure passed, they felt this higher standard was justified.

These examples are just that, not recommendations. Each steering committee in consultation with their fellow producers will have to determine appropriate levels of support for their industry.

### **Minimum Regulations**

At the moment, there is no government regulation that sets minimum requirements for the conduct of producer plebiscites. However, the FFIDA legislation does permit the Lieutenant Governor in Council (i.e., the Cabinet) to create such a regulation. This regulation might address:

- a) the minimum number or percentage of the total producers in the group who must indicate support for the proposals;
- b) the minimum number of days or weeks of notice that must be granted to producers between the time of notice of the proposals and the vote on the proposals;
- c) the rules respecting confidentiality to be followed by individuals conducting the plebiscite. The Freedom of Information and Protection of Privacy Act protects some information provided to governments by individuals, including information relating to production.

### **Informing the Minister**

The Minister should be advised by letter of the outcome of the poll. Details should include how notice was sent to producers, how many participated, how many voted in favour and how many against. If volume of production is a factor in calculating the results, these details should also be provided. If the results display support for the formation of a council in the opinion of the steering committee, a request to create a council should be made to the Minister.

If the Minister agrees with the steering committee, and is satisfied the vote was free and fair, and if the minister is convinced producers were well-informed of its purpose, then the minister will proceed with the necessary legal steps to create the Council and Fund.

## **CREATION OF THE COUNCIL AND FUND**

### **CHAPTER SIX**

#### **Minister's Letters Create and Appoint**

Once the Minister is satisfied that the tests set out in the FFIDA have been met, documentation necessary to create the council and fund will be prepared. The Minister signs a letter naming the council and the fund in accordance with the power granted in s.2(4)(b) of the Act. When the Minister signs the letter, the council and the fund are formed.

The Minister will also sign a letter or letters appointing members of the council. If some or all producer members of the council were elected, those persons are council members by virtue of the election conducted by the commodity group.

The Minister will appoint the remaining members of council.

#### **Non-Producer Representatives**

The Minister will normally consider recommendations regarding other industry appointments from the elected council and will appoint a ministry representative who will serve the needs of the council well.

A Ministry representative will be appointed to the Council to serve as a resource person and to bring to the council some of the interests and concerns of the Minister and Ministry.

The Act recognizes in s.2(4)(a) the value of having the broader interests of the industry represented on the Council. Therefore, depending on the circumstances of each industry, and on the industry's recommendations to the Minister, the Ministry may seek representation from the supply, processing distribution, consumer interests, market research or other sectors.

## **Public Policy Considerations Regarding Council Membership**

### **Merit**

It is vital when council members are elected or appointed that the merit principle be observed. The merit principle means that the best qualified individuals in the industry are asked to sit on the Council. The selection of qualified persons is encouraged on the basis of education, skills, knowledge, experience, past performance, community and industry service and level of commitment.

### **Sector and Regional Representation**

The best interests of the industry will likely be served by a Council with balanced representation. That balance should be regional as well as sectoral, although, again the circumstances of each commodity group will determine what constitutes "balance". The basic concern is that the Council membership accurately reflects the composition of its industry - geographically, demographically and sectorally.

### **Gender Equity**

The role of women is changing in society. Today, women comprise 45% of the B.C. labour force and that figure is rising. Many women are highly educated, well qualified and capable of providing a high level of service to farming and fishing industries. Statistically this component of the labour force is under-represented in the higher levels of decision -making.

As part of its effort to see all groups in society represented on public bodies, it is B.C. government policy that all agencies, boards and commissions have an equal number of qualified representatives from each gender.



## Other Groups

Government policy requires all agencies, boards and commissions to strive for qualified representation by people from the aboriginal, disabled and visible minority communities where those groups participate in the industry. In finalizing the appointment of a council, all of the variables discussed above will be considered and a consensus that balances differing interests will be sought. When industry recommends an appointment to the Minister, it should present him with a choice of qualified candidates.

It may be helpful to work closely with the Ministry to ensure the proposals meet all the criteria and interests. The Minister may make suggestions, ask for endorsements or make alternate appointments if the variables discussed above are not met.

## THE COUNCIL IS IN BUSINESS

### Determining the Levy

Under the FFIDA legislation, the Council establishes the levy. This will be the Council's first item of business. Different classes of levies are possible. For example, very small producers can be exempted, or the Council can adopt a sliding scale method of payment. Such a scale might see the largest producers pay a smaller amount per volume of production; but their total payments would still be greatest because their total production is higher.

Alternatively, the Council could cap the total amount payable by a single producer to ensure that no one person bears a disproportionate share of the total levy.

### **CALCULATING THE LEVY: SOME EXAMPLES**

#### *Here are some ways a levy could be established*

- an annual levy using a formula based on the number of recorded births;
- a formula that divides total industry production by the number of producers, and then multiplies that figure an agreed upon percentage;

$$\frac{\text{Total value of product harvested}}{\text{Total number of producers}} \times ?\% =$$

(In this case, the Attorney General will want to ensure that the information used in calculating the levy is clear and easily accessible)

- a levy based on sales (either dollars or weight)
- a levy based on catch

Once a levy has been determined, the Attorney General's Ministry prepares a regulation in consultation with MAFF, giving the levy force of law. The regulation is passed by Cabinet on the recommendation of the Minister, through the usual Order in Council process. Each industry that establishes a Council has its own regulation. Its provisions apply only to that industry. In addition to the levy itself, the regulation also defines what the commodity is, who the producer is, and what groups are involved in the collection system. The regulation will describe the levy system, set the time of year at which it will be paid and outline some other administrative details that are incidental to the Council operation.

## **THE COUNCIL'S FIRST MEETING**

Immediately at its first meeting, the Council should elect members to serve as chair and secretary. It may also elect a vice-chair and treasurer if it wishes.

Some or all of these officers should be given the authority by resolution to establish a bank or credit union account for the Council and act as signers on the account.

As described above, the council must pass a resolution establishing the levy or classes of levy. This resolution is forwarded to the Ministry to form the basis for a government regulation establishing the levy scheme.

Finally, if it has not already done so, the Council should adopt an Operating Resolution which sets out standard procedures for conducting the business of the Council, including Council meetings. These are very similar to Corporate By-laws under the Companies Act or Rules of Association under the Cooperatives Act.

The steering committee may have already developed this resolution as part of the development plan. In that case, the Council only needs to formally adopt it.

If the Operating Resolution has not been prepared, the Council should make it a priority to do so.

Part Two of this Manual ("Operations") begins with a discussion of the contents of the Operating Resolution and Appendix D provides a sample Resolution which your Council can adopt or adapt to suit its own needs.

## **APPENDICES**

- A. Farming and Fishing Industries Development Act
- B. Outline/checklist for a development plan
- C. Sample Development Plan
- D. Glossary of Terms

**END OF PART I.**