



Promising new apple cultivars for direct market and Pick Your Own

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Apple variety trends

- 30 years ago few apple varieties account for most of production:
 - Delicious
 - Golden Delicious
 - McIntosh
 - Cortland

Apple variety trends

- During the 1980's new varieties were introduced:
- Gala, Granny Smith, Braeburn
- They were embraced by orchards
- High demand, high price, high profit

Apple variety trends

- During the late 1980's and early 1990's many varieties were available:
- Active testing of these varieties
- Bud/scion wood available and shared
- Major problem deciding which variety to plant???

Apple variety trends

- Starting mid-1990's new varieties were not made available to test:
- Strict interpretation of patent laws
- Breeders and owners of chance seedlings wanted to recover costs to fund future work
- Attempt to restrict supply to prevent overproduction and have control over quality

Club variety era

- Best and newest varieties restricted and not available to general growing community
- Distribution of these varieties limited to larger fruit growers
- Will small retail growers be left out in the cold?

Club variety era



- A case for optimism?
- Not all varieties will go the club route
- Varieties with a single (or two) flaw have other outstanding/unique characteristics
- These varieties will be available to you!

Club variety era



- A case for optimism?
- Consumers looking for variety of taste, color, shape
- Consumers are looking for something new
- Customers will return to purchase new varieties they have tried (assuming they are good!)

Consumer evaluation

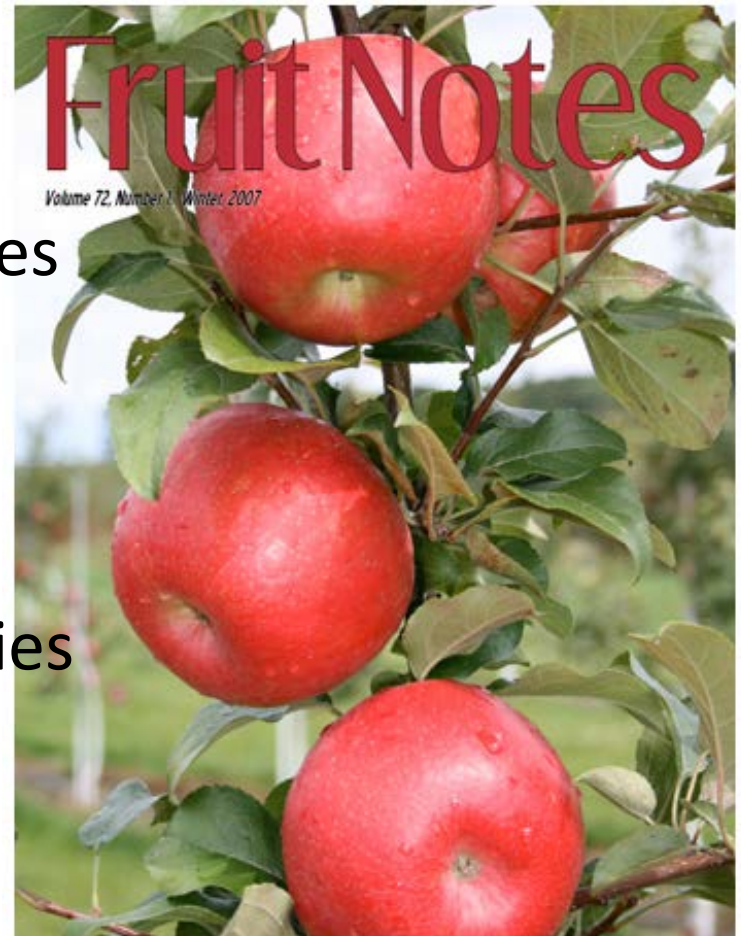
- At UMass Cold
Spring Orchard,
Belchertown

VARIETY EVALUATION FORM											
Variety _____											
Please sample the apple(s) on display and provide us with an evaluation of the variety by filling out this short form. Please circle the appropriate number.											
Appearance											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Taste											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Crispness											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Juiciness											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Texture											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Overall											
Like very much	1	2	3	4	5	6	7	8	9	10	Dislike
Additional comments on this variety:											
What variety do you usually purchase _____?											
Would you purchase this variety? Yes No											
Would you purchase this variety in preference to your normal variety? Yes No											
What type of apple do you usually like (circle one)											
Sweet Sweet/tart Tart/sweet Tart											

Results in Fruit Notes

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- Customers:
 - Want new varieties
 - Want to experience new tastes
 - Are willing to pay a premium
 - Will drive out of their way to get different tasting varieties
 - They become PASSIONATE about them



Suggested approach

- Have available at least 2 new and different varieties for each marketing period
- Plant only enough of a variety to last for no more than a month, perhaps even less (this is safe)
- Advantage to creating perception to buy apples now before the supply runs out

Suggested approach

- Plant only enough trees to produce 50 to 250 bushels
- Exact number will depend on size of your store, but do not plant too many
- Plant in hi-density (tall-spindle) so they will be in production ASAP

3rd-leaf tall-spindle 'Silken'



Suggested approach

- Customers can be introduced to several new varieties throughout the season
- Have a featured variety every week or two
- It is important customers be given the opportunity to taste/sample
- You may give apples away initially but you may sell many more at a higher price in the long run...

Customers have different tastes

Type of apple	Percent of total respondents
Sweet	16
Sweet/tart	48
Tart/sweet	30
Tart	6

Suggested approach

- Downside that you must learn to grow, harvest and market new varieties with little information
- There is a learning curve, but once you have this knowledge, you will have a competitive advantage

One little problem...

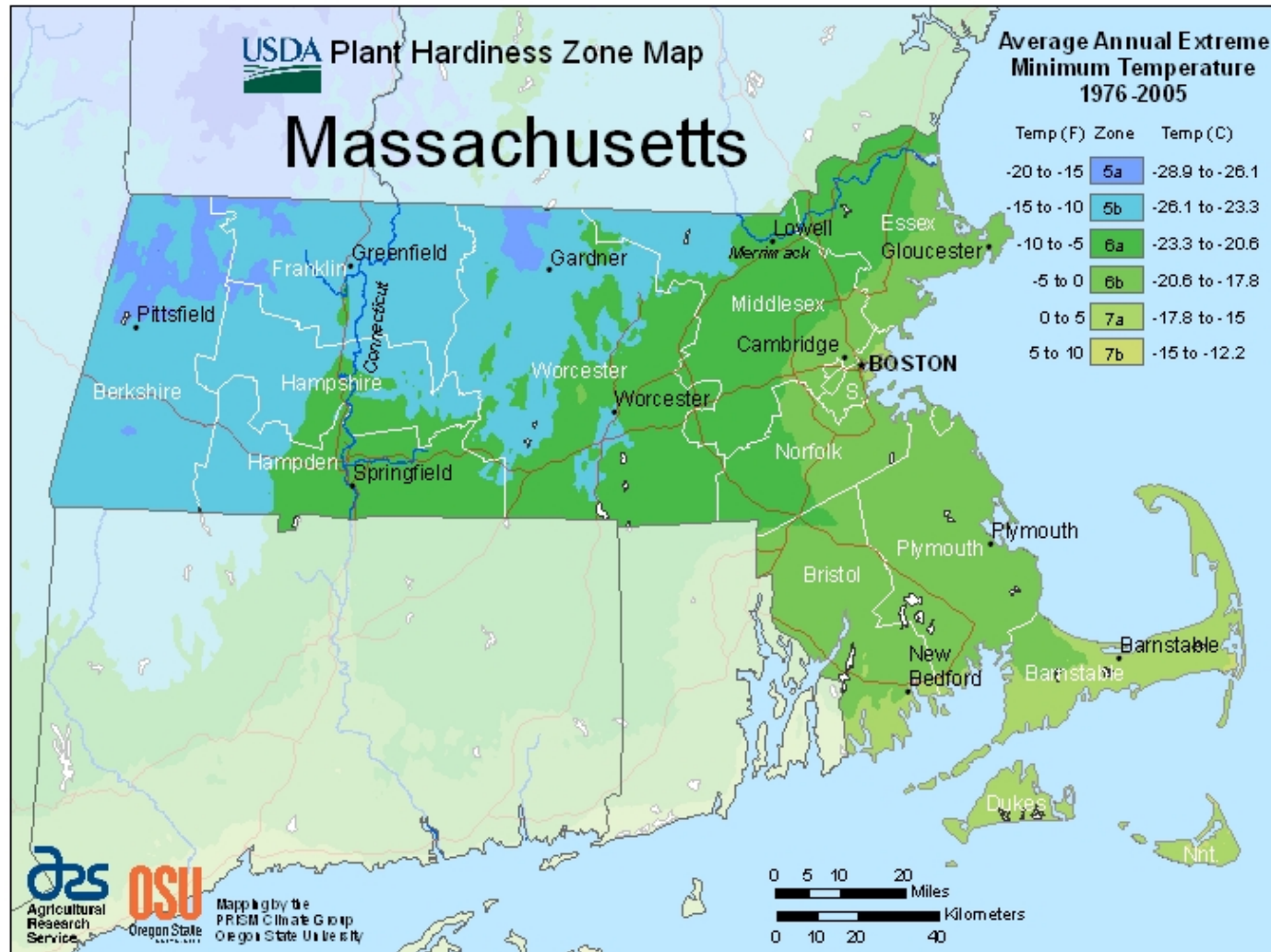
- HOW do I get trees?
- Some are commercially available
- Can be custom-budded
- Bench-grafts, sleeping eyes, plant-in-place
- Respect plant patents and trademarks



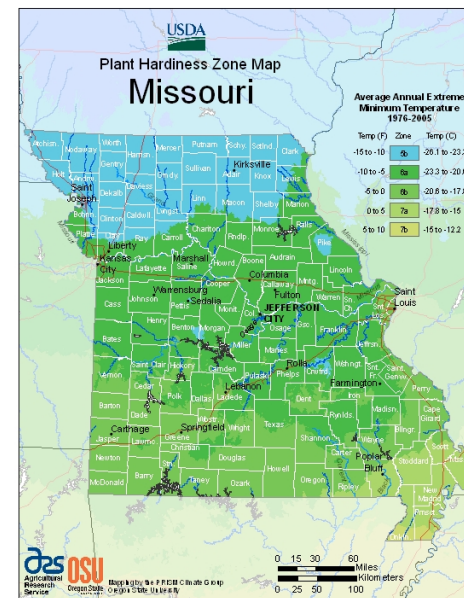
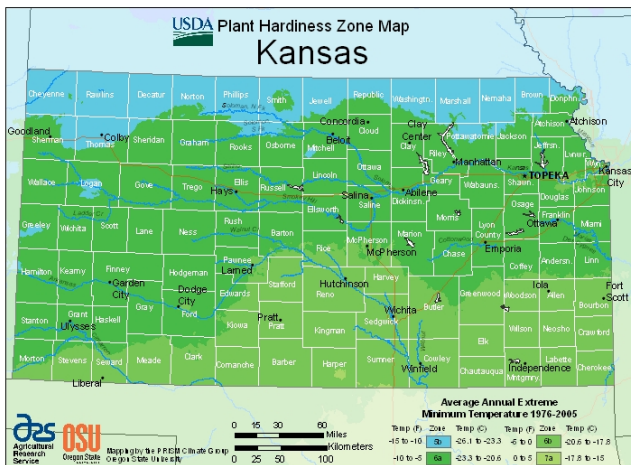
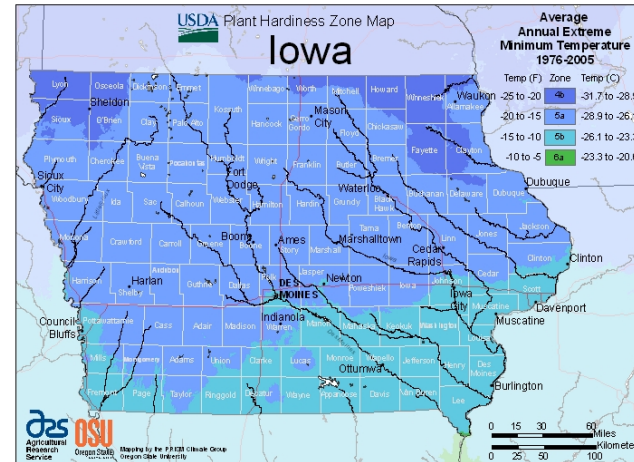
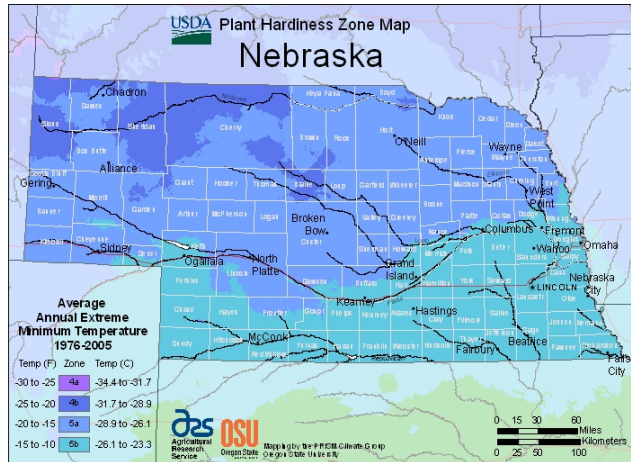
Marketing periods

- August 15-31
Complement peach sales
- September 1-15
Need more and better choices
- September 16-30
Alternative to McIntosh
- October 1-15
Tradition, great opportunity
- After October 15
Getting late but excellent quality and storage

Let's be realistic...



Let's be realistic...



August 15-30

- Redfree
- Ginger Gold
- Zestar!
- Sansa (pictured)
- Paulared



Redfree

- Scab-resistant
- Early (mid-August)
- Deep red
- Small-medium size
- Good quality early apple
- Crops annually
- Do not store
- Successful in
Minnesota (Zone 4b)



Ginger Gold

- Labor Day apple
- Large, firm attractive
- Good mild flavor
- Long picking window
- Limited storage life
- Widely adapted?
- Retail or wholesale
- A must for roadside stands



Sansa

- Gala-like
- Ripens 2 weeks before Gala
- Can be a weak grower
- Questionable hardiness?



Zestar!™

- Ripens with Ginger Gold
- Attractive, pink-red up to 50%
- Medium-large fruit
- Good, unique flavor
- Excellent sugar-acid ratio
- Precocious, grower-friendly
- Birds like it
- Should be winter-hardy given origin (U of Minnesota)



September 1 - 15

- Akane →
- Silken
- Arlet
(Swiss Gourmet)
- Linda Mac,
Ruby Mac



Akane

- Bright red, attractive
- Aromatic
- Medium fruit size
- Ripens 1.5 weeks before Gala
- Good storage
- Good for baking
- Winter hardiness???



Silken

- Attractive, lemon-yellow, russet-free skin
- Crisp and juicy
- Ripens week before Gala
- Fruit size can be small
- Bruises easily
- Grower-friendly tree
- One month harvest and storage window
- AgCanada British Columbia, hardiness?



Arlet (Swiss Gourmet)

- Golden Delicious X Idared
- Stores quite well
- Drop may be a problem
- May become greasy on the tree
- Taste is mild and it may be polarizing – some like it and some do not

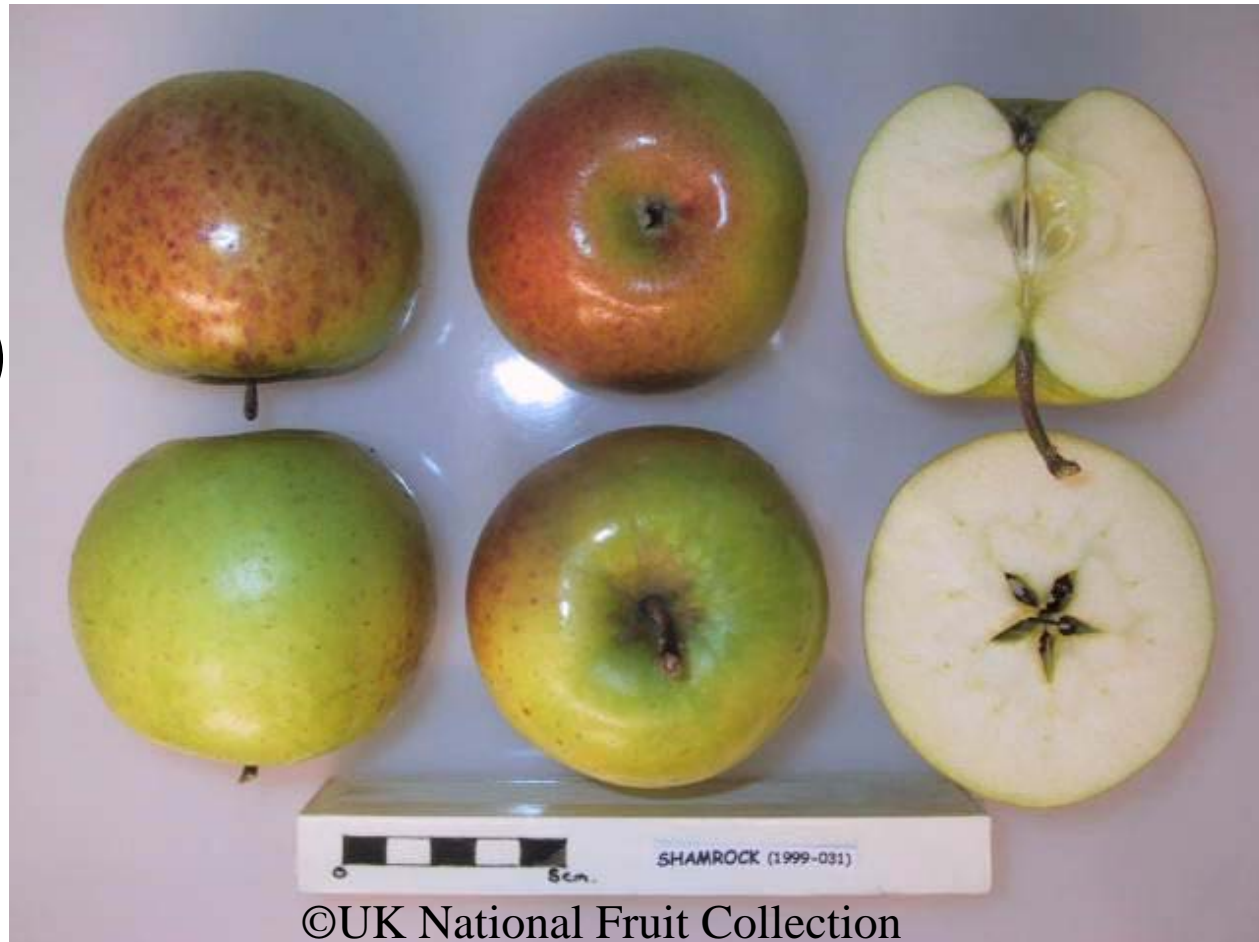


Linda Mac, Ruby Mac



September 15 - 30

- CrimsonCrisp
- Shamrock
- Early Fuji
- Blondee
- (Jonagold)



©UK National Fruit Collection

Crimson Crisp

- Very attractive red
- Firm, crisp, tart
- Scab-resistant
- Complex flavor
- Somewhat
fireblight susceptible
- Medium size
- Best when flavor develops
- Question winter hardiness?



Shamrock

- Granny Smith-like apple in McIntosh season
- Tastes like a McIntosh when fully ripe or after storage
- Medium to large size
- Precocious, productive
- Niche variety
- Like McIntosh, ReTain can be useful



Early Fuji strains

- Daybreak, Rising Sun, September Wonder, Morning Mist, etc.
- Important addition to a retail stand
- Similar to Fuji in taste
- Dissimilar
 - Less firm
 - Does not store as well



Blondee

- Medium size, yellow apple
- Smooth skin
- Crisp and very firm
- Good tart-sweet flavor
- Very good storage life
- Holds well on tree
- Winter hardiness??



October 1 - 15

- Creston
- Hudson's Golden Gem
- Hampshire (pictured)
- Snowsweet



Creston

- Large, crisp and juicy (Honeycrisp-like?)
- Alternative to Jonagold?
- Pleasant, refreshing taste
- Lacks good red color
- Very popular in taste tests



Hudson's Golden Gem

- Fully russeted
- Very good pear-like flavor
- Excellent
fresh desert quality
- Grower-friendly
- Some cracking
- Excellent roadside
stand candidate



Hampshire

- Very attractive nearly full-red apple
- Medium size and good mild flavor
- Ripens with Delicious
- Stores well
- Grower-friendly tree
- Uniform fruit size
- Annual bearing



SnowSweet®

- Snow white flesh
- Large, attractive fruit
- Early October
- Should be winter-hardy



After October 15?

Suncrisp

GoldRush

Topaz

Novaspy

Golden russet



Suncrisp

- mid-October
- spicy, unique flavor, highly desirable
- beautiful pink blush
- must be thinned to get size and quality



Goldrush

- Halloween harvest
- Stores very well
- Dense, complex flavor when fully ripe
- Needs very aggressive thinning
- Scab-resistant



Crimson[®] Topaz

- Vanda X Rubin
- Czech Republic (1990's), scab-resistant
- Crisp flesh with a 'sharp' flavor
- Easy to grow, but must be thinned
- Fireblight susceptible
- Most planted in organic orchards in Europe



Novaspy

- Harvested 1st week in October
- Medium-large fruit
- 85% red blush
- White, medium-melting non-browning flesh
- Good for baking, sauce, fresh eating
- Unique, drooping tree habit reminiscent of alder



Golden Russet

- Fully russeted skin, yellow-copper color
- Ripens 3rd week of October
- Fine-grained, firm, sweet but somewhat dry flesh
- Excellent quality
- Excellent for cider and hard cider (ice cider!)



Conclusions

- There are many good new or unique varieties available for all seasons
- Customers like to try new varieties – let them try them
- An apple does not have to be perfect to be popular, have a loyal following and be highly profitable!

Thank you and good luck!

- appletesters.net
- jmcextman.blogspot.com
- orangepippin.com
- umassfruit.com
- eapples.org

