

# New Peach Variety/Selection Plantings and Evaluation When Grown to the Perpendicular-V

Jon M. Clements

*Department of Plant, Soil, & Insect Sciences, University of Massachusetts*

From 2000 through 2002 over 40 named and numbered peach varieties and numbered selections from the James Friday ‘Fruit Acres’ (FA) breeding program were planted at the UMass Cold Spring Orchard Research & Education Center (Orchard Block M2). These are being casually evaluated for cold hardiness, yield, and fruit quality for International Plant Management with an objective of testing them at the limit of their northern growing range. Many of these varieties are purported to have superior red color and size to make them good candidates for retail sales. They are also being grown to the perpendicular-V peach pruning system that originated in California and has become more popular in the East. In 2003, a small crop was picked from these varieties, however, extreme cold in January 2004 (-12°F. on two nights in January) left them virtually cropless in 2004. During the spring and summer of 2004, the trees were casually evaluated for bloom quantity and crop load. Results of the bloom evaluation are presented in Table 1. Most of these peach varieties and selections from Michigan are not very bud hardy. All had either no crop or a very light crop (RisingStar, among a few others) in 2004. Growers that plant these varieties can expect a full or partial crop loss in the coldest winters, but, some of them appear to do better than others, and are worthy of grower trial.

In 2002 and 2003 in cooperation with the Orchard sales, a block of four named ‘super-sweet’ varieties from Zaiger breeding program in California was planted in Orchard block H4 with the objective of seeing how these varieties perform under our conditions. These are also being trained to the perpendicular-V. Already over

Table 1. May 2004 flower/fruit bud injury rating of Fruit Acres (FA) peach varieties and selections, UMass Cold Spring Orchard Research & Education Center

Variety/selection	Year planted	Number of trees	Flower/fruit bud injury rating <sup>z</sup>
StarFire (FA-11)	2001	2	+
BlazingStar (FA-12)	2001	2	+
GlowingStar (FA-17)	2001	2	-
BlushingStar (FA-18)	2001	2	+
FA-32	2002	2	-
RisingStar (FA-47)	2001	2	+
RedStar (FA-52)	2001	2	+
CoralStar (FA-59)	2001	2	-
FA-65	2002	2	-
FA-68	2002	2	-
FA-71	2002	2	-
AllStar (FA-80)	2001	2	+
FA-81	2002	3	-
FA-86	2000	1	-
FA-100	2000	2	-
FA-101	2000	2	-
FA-102	2000	2	+
FA-116	2002	2	-
FA-117	2002	3	-
FA-118	2002	2	-
FA-119	2002	3	-
FA-133	2000	1	-
FA-134	2000	1	-
FA-135	2000	1	-
FA-136	2000	1	-
FA-138	2000	1	-
FA-140	2002	2	-
FA-142	2000	1	-
FA-143	2000	1	+
FA-144	2000	1	-
FA-145	2000	1	-
FA-147	2000	1	-
FA-220	2002	3	-
FA-222	2002	2	-
FA-232	2002	1	-
FA-236	2002	2	-
FA-237	2002	3	-
FA-238	2002	1	-
FA-240	2002	3	-
FA-241	2002	2	-
FA-242	2002	2	-
FA-243	2002	3	-
MSU-26	2002	5	-
Summer Beauty nectarine	2000	26	-
JL 1024 (apricot)	2000	1	-

<sup>z</sup> Rating at bloom, - = no bloom; + = light bloom, not enough for a full crop.

Table 2. May 2004 flower/fruit bud injury rating of super-sweet peaches, UMass Cold Spring Orchard Research & Education Center.

Variety	Year planted	Number of trees	Flower/fruit bud injury rating <sup>z</sup>
Jade	2003	8	NR
HoneyKist	2002	9	+
HoneyBlaze	2002	12	-
CountrySweet	2002	12	+
Jonasweet	2002	19	-

<sup>z</sup> Rating at bloom, May 2004; NR = not rated, trees too young; - = no bloom; + = very light bloom, potential very light crop.

Countrysweet and Honeykist may be bud hardy enough to bear a crop in some years. A few fruit from each of these varieties were picked in 2004, and they will be an excellent addition to retail sales for Massachusetts tree-fruit growers because of their sweetness (lack of acidity). Jonasweet and Honeyblaze have already experienced tree mortality and no crop, so they are already not recommended for planting. Not enough data on Jade are available at this time.

### *Acknowledgements*

Sources of support include: International Plant Management (Lawrence, MI); Massachusetts Fruit Grower's Association Horticultural Research Trust Fund (2004); UMass Cold Spring Orchard fruit sales (ongoing); Adams County Nursery (Aspers, PA).

the winter of 2002-2003 some trees planted in 2002 died, and were replaced in 2003. Table 2 lists the varieties and our first impression of how winter hardy these are going to be. Initial impressions suggest that

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