## Observations on Winter Flower-bud Damage and Crop Load of Several Peach Varieties

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The cold winter of 2004 resulted in an excellent chance to evaluate existing peach varieties at the UMass Cold Spring Orchard Research & Education Center in several blocks being used for sales (Orchard Blocks K1, H1, H2) for fruit bud injury, flowering, and crop load in the spring and summer of 2004. Results of this casual evaluation are presented in Table 1. Ultimately, the crop-load rating is what peach growers would be most interested in. In this case, a crop-load rating or 2.5 and up was a good, moderate crop and would not be a problem. Varieties with a crop load rating of less than 2 had significant winter injury of flower buds and should be planted with caution. This information will eventually be used to produce a list of recommended peach varieties for Massachusetts growers based on bud hardiness and other characteristics.

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Table 1. Bloom and crop-load evaluation of named peach varieties at UMass Cold Spring Orchard Research & Education Center in 2004.

Variety	Year planted	flower injury <sup>z</sup>	Crop load rating <sup>y</sup>
v arrecty	piunteu	injur y	
Arctic Glow	1994	20	2.5
Arctic Rose	1994	50	2
Arctic Queen	1994	65	1
BlazingStar	1999	70	1.5
Bounty	1990	50	3.5
Earlired	1994	75	0.5
Earliscarlet	1990	25	4.5
Easternglo	1994	95	0
Encore	1990	10	4
Fantasia- young	1994	60	1
Fantasia- old	1990	30	3
Fayette	1990	85	1
Flavorcrest	1990	95	1.5
Garnet Beauty	2000	99	0.25
Glowhaven	1999	60	2.5
Harcrest	1990	20	3.5
Harrow Beauty	1994	25	4.5
Harrow Beauty	1990	35	3.5
Jerseydawn	1990	30	5
Jim Dandy	1990	30	5
John Boy	1994	90	1.5
Lady Nancy	1994	75	1
Madison	1990	15	4
Newhaven	1990	40	4.5
NJ 275	1990	50	2
PF 1	1994	95	0
PF 15A	1994	50	5
PF 17	1994	85	2.5
Raritan Rose	1994	40	5
Redgold	1990	60	3.5
Redhaven	1990	30	5
RisingStar	1999	60	3
Salem	1994	90	3
Salem	1990	75	1
Sentry	1994	95	1.5
Sugar Lady	1994	90	1.5
Summer Beauty	1994	99	0
Summer Beauty	1990	35	4
Summer Pearl	1990	25	3
Sunglo	1994	30	3.5
White Lady	1990	70	2.5

 $<sup>^{</sup>z}$  0% = no injury, 100% = all flower buds injured (no bloom)

y relative scale, 0 (no crop) to 5 (full crop)