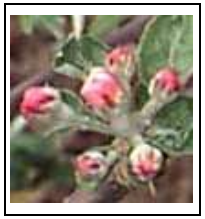
CRITICAL SPRING TEMPERATURES FOR TREE FRUIT BUD DEVELOPMENT STAGES

Pome Fruit (Apples and Pears)									
Apples									
Apples	**Silver tip**	**Green Tip**	**Half inch green**	**Tight Cluster**	**First Pink**	**Full Pink**	**First Bloom**	**Full Bloom**	**Post Bloom**
Old temp	**16**	**16**	**22**	**27**	**27**	**28**	**28**	**29**	**29**
10% kill	**15**	**18**	**23**	**27**	**28**	**28**	**28**	**28**	**28**
90% kill	**2**	**10**	**15**	**21**	**24**	**25**	**25**	**25**	**25**
Pears									
Pears	**Bud scales separating**	**Blossom buds exposed**	**No name**	**Tight cluster**	**First White**	**Full White**	**First Bloom**	**Full Bloom**	**Post Bloom**
Old temp	**18**	**23**		**24**	**28**	**29**	**29**	**29**	**30**
10% kill	**15**	**20**	**No data**	**24**	**25**	**26**	**27**	**28**	**28**
90% kill	**0**	**6**		**15**	**19**	**22**	**23**	**24**	**24**

Stone Fruit (Apricots, Peaches and Plums)

Apricots									
Apricots	**Swollen Bud**	**Tips separate**	**Calyx red**	**First White**	**First Bloom**	**Full Bloom**	**In the shuck**	**Green Fruit**	
Old temp	--	23	--	25	--	28	--	31	
10% kill	15	20	22	24	25	27	27	28	
90% kill	--	0	9	14	19	22	24	25	

Peaches									
Peaches	**Swollen Bud**	**Calyx Green**	**Calyx Red**	**First Pink**	**First Bloom**	**Full Bloom**	**Post Bloom**		
Old temp	23	--	--	25	--	27	30		
10% kill	18	21	23	25	26	27	28		
90% kill	1	5	9	15	21	24	25		

European Plums									
European Plums	**First Swelling**	**Side White**	**Tip Green**	**Tight Cluster**	**First White**	**First Bloom**	**Full Bloom**	**Post Bloom**	
Old temp	--	--	--	--	23	27	27	30	
10% kill	14	17	20	24	26	27	28	28	
90% kill	0	3	7	16	22	23	23	23	

CRITICAL SPRING TEMPERATURES FOR TREE FRUIT BUD DEVELOPMENT STAGES

Cherries

Sweet Cherries					No picture				
Sweet Cherries	**Swollen Bud**	**Side Green**	**Green Tip**	**Tight Cluster**	**Open Cluster**	**First White**	**First Bloom**	**Full Bloom**	**Post Bloom**
Old temp	**23**	**23**	**25**	**28**	**28**	**29**	**29**	**29**	**30**
10% kill	**17**	**22**	**25**	**26**	**27**	**27**	**28**	**28**	**28**
90% kill	**5**	**9**	**14**	**17**	**21**	**24**	**25**	**25**	**25**

Tart Cherries									
Tart Cherries	**Swollen Bud**	**Side Green**	**Green Tip**	**Tight Cluster**	**Open Cluster**	**First White**	**First Bloom**	**Full Bloom**	
10% kill	**15**	**24**	**26**	**26**	**28**	**28**	**28**	**28**	
90% kill	**0**	**10**	**22**	**24**	**24**	**24**	**24**	**24**	

Old standard temperature is the lowest temperature that can be endured for 30 minutes without damage. This chart also shows the temperature that will kill 10 % and 90 % of normal fruit buds.
These numbers were taken from Washington (WSU) and Michigan (MSU) Bulletins. Apple - WSU EB0913, Pears - WSU EB0978, Sweet Cherries - WSU EB1128, Peaches - WSU EB0914, Apricots - WSU EB1240, Tart Cherries - MSU Research. Rpt. 220,

Compiled by Mark Longstroth, MSU Extension Educator, all photos by Mark Longstroth (MSUE)

See Tree Fruit Critical Temperatures (pdf)