Tart Cherry Bud Stages & Critical Temperatures

Fig. 1. Stage 1, 'First Swell'.

Fig. 2. Stage 2, 'Side Green'.

Fig. 3. Stage 3, 'Green Tip'.

Fig. 4. Stage 4, 'Tight Cluster'.

Fig. 5. Stage 5, 'Open Cluster'.

Fig. 6. Stage 6, 'First White'.

Fig. 7. Stage 7, 'First Bloom'.

Fig. 8. Stage 8, 'Full Bloom'.

Critical temperatures (° F) for tart cherry fruit buds*.

Bud Development Stage	1	2	3	4	5	6	7	8	9 (post-bloom)
Ave. Temp. for 10% Kill	15	24	26	26	28	28	28	28	28
Ave. Temp. for 90% Kill	0	10	22	24	24	24	24	25	25

* Temperatures from researchers at Michigan State University. Mortality is based on 30 minute exposure to the critical temperature given for that level of bud kill. Values are intended for use only as a general guideline of when to begin frost protection efforts. Actual bud kill will vary with the bud stage, cold intensity (temperature), and duration (how long the temperature remains at a given level). The actual stage is defined by the most advanced buds in the sample, and the 10% and 90% numbers reflect the entire sample. Caution is advised -- it is dangerous to attribute too much precision to critical temperature data.

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