Apple Bud Stages



Fig. 1. Stage 1, 'Silver Tip'.



Fig. 2. Stage 2, 'Green Tip'.



Fig. 3. Stage 3, '1/2 inch Green Tip'.



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



Fig. 5. Stage 5, 'First Pink'.



Fig. 6. Stage 6, 'Full Pink'.



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



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

Critical temperatures (° F) for apple fruit buds¹.

Bud Development Stage	1	2	3	4	5	6	7	8	9 (post-bloom)
Ave. Temp. for 10% Kill	15	18	23	27	28	28	28	28	28
Ave. Temp. for 90% Kill	2	10	15	21	24	25	25	25	25

¹ For Red Delicious. Critical temperatures prior to petal fall are approx. 1° lower for Golden Delicious and Winesap and approx. 2° lower for Rome Beauty. All varieties are equally tender after petal fall. Temperatures from researchers at Washington St. University's research center, Prosser (1964-76). 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).

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