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Plum Frost Damage Chart

Critical spring temperatures by bud stage, from Michigan State University Extension's compilation of the WSU and MSU bulletins.



The temperature that kills 10% and 90% of plum buds after 30 minutes, by bud stage. Buds grow more tender as they open, so the same frost does more harm later in spring.

Bud stage	10% killed	90% killed	Between 90% and 10% killed	Date reached this year
Bud swell	14°F (−10°C)	0°F (−18°C)		
Side white	17°F (−8°C)	3°F (−16°C)		
Tip green	20°F (−7°C)	7°F (−14°C)		
Tight cluster	24°F (−4°C)	16°F (−9°C)		
First white	26°F (−3°C)	22°F (−6°C)		
First bloom	27°F (−3°C)	23°F (−5°C)		
Full bloom	28°F (−2°C)	23°F (−5°C)		
Post bloom	28°F (−2°C)	23°F (−5°C)		



Reading the chart. At the 10% figure about one bud in ten is killed after 30 minutes of cold; at the 90% figure, about nine in ten. A blank cell (—) means the published table gives no figure for that stage. °C figures are conversions, rounded.

Cold-night log

Date	Low (°F)	Bud stage	What you saw afterwards

Source: Michigan State University Extension compilation of the WSU and MSU critical-temperature bulletins

Data as of 15 Nov 2026