

Understanding Plant Zones

The US Department of Agriculture developed a system of Hardiness zones to help people determine what plants are the best choice in terms of winter hardiness for their particular location.

Hardiness zones are based on the "average winter low temperature" for an area. The Zone for which a plant is rated is indicated by a number 1-11 with 1 being the coldest region and 11 the warmest.

It's important, when choosing a plant to make certain that it rate for your zone or for a zone lower in number than your own. For example if you live in Ohio, and are listed as a USDA Zone 5, you want only plants rated for zone 5 or lower. If you plant a shrub rated at zone 6 or 7 in your region most likely it will suffer or die during the winter.

It's possible to get by growing plant rated for a higher zone than the one in which you live. The plant may live a few years if the winters are unusually mild, as they have been lately. If you insist on taking the risk of growing plant rated higher than your zone, try these techniques. 1) Plant in protected areas or micro-climates i.e. close to the house foundation, in a court yard , 2) Apply extra mulch after the plant is formant. This works for small shrubs like roses and Hydrangea. 3) Protect from winter winds and winter sun. Burlap screens, old Christmas trees, or planting in protected area.

It's important to remember that "average winter low temperature" is only one factor that determines how well a plant will grow in your area. Soil type and drainage, sunlight exposure, rapid temperature fluctuations, and absolute winter low temperatures can all impact the over-winter survival of a plant. Be careful not to assume that a plant is not hardy just because you lose one plant during the winter. The winter of 1999-2000 was an exceptionally mild winters but many people suffered plant losses. Why? We had a unseasonably warm November and December followed by a quick drop in temperatures. Many plants did not acclimate before winter set in and were killed. Oh, the joy of gardening.

USDA Hardiness Zones and Average Annual Minimum Temperature Range

USDA Zone	Temperature Range	Example Cities
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1	Below -50 F (below -45.6C)	Fairbanks, Alaska Resolute, Northwest Territories (Canada)
2a	-50 to -45 F (-42.8 to -45.5 C)	Prudhoe Bay, Alaska Flin Flon, Manitoba (Canada)
2b	-45 to -40 F (-40.0 to -42.7 C)	Unalakleet, Alaska Pinecreek, Minnesota
3a	-40 to -35 F (-37.3 to -39.9 C)	International Falls, Minnesota St. Michael, Alaska
3b	-35 to -30 F (-34.5 to -37.2 C)	Tomahawk, Wisconsin Sidney, Montana
4a	-30 to -25 F (-31.7 to -34.4 C)	Minneapolis/St.Paul, Minnesota Lewistown, Montana
4b	-25 to -20 F (-28.9 to -31.6 C)	Northwood, Iowa Nebraska
5a	-20 to -15 F (-26.2 to -28.8 C)	Des Moines, Iowa Illinois
5b	-15 to -10 F (-23.4 to -26.1 C)	Columbia, Missouri Mansfield, Pennsylvania
6a	-10 to -5 F (-20.6 to -23.3 C)	St. Louis, Missouri Lebanon, Pennsylvania
6b	-5 to 0 F (-17.8 to -20.5 C)	McMinnville, Tennessee Branson, Missouri
7a	0 to 5 F (-15.0 to -17.7 C)	Oklahoma City, Oklahoma South Boston, Virginia
7b	5 to 10 F (-12.3 to -14.9 C)	Little Rock, Arkansas Griffin, Georgia
8a	10 to 15 F (-9.5 to -12.2 C)	Tifton, Georgia Dallas, Texas
8b	15 to 20 F (-6.7 to -9.4 C)	Austin, Texas Gainesville, Florida
9a	20 to 25 F (-3.9 to -6.6 C)	Houston, Texas St. Augustine, Florida
9b	25 to 30 F (-1.2 to -3.8 C)	Brownsville, Texas Fort Pierce, Florida
10a	30 to 35 F (1.6 to -1.1 C)	Naples, Florida Barstow, California
10b	35 to 40 F (4.4 to 1.7 C)	Miami, Florida Coral Gables, Florida
11	above 40 F (above 4.5 C)	Honolulu, Hawaii Mazatlan, Mexico