Unique Garden Centre

Understanding The Hardiness Zone Map

We always get so many questions regarding if a plant is hardy here. It will help you out to know how the zone map is determined and what factors affect hardiness both for and against. The Canadian plant hardiness zone map is primarily based on the lowest mean temperature for that area. Many other site conditions can affect a plant's ability to survive. Here are some tips to help you determine how your conditions affect your zoning.

First determine your zone rating on the Canadian zone hardiness map. Below is the corresponding minimum temperature for some of the zones. Regina area is considered zone 3.

Zone 2 -45C,
Zone 3 -45C to -40C
Zone 4 -40C

Although the Canadian plant hardiness map is primarily determined by temperature, it does take into consideration the length of frost free period, moisture, winds, etc. Zone edges are very indefinite as well.

Second, identify hardiness modifiers. The hardiness map does not take into consideration microclimates that may be naturally present or created by human intervention. Natural microclimates occur as a result of things such as a body of water, hills, valleys or simply a natural phenomena. Humans create microclimates by construction, building fences, planting of trees or remodeling of the terrain. For example, a hillside, whether natural or manmade, will have a different affect on the planting, then the same planting at the bottom of the hill.

Thirdly, what can you do to improve your plants potential for survival? If you are like most of us in the Regina area, you have a heavy clay soil base to work with. Before you plant, amend the soil with lots of organic matter to improve soil quality. Locate known borderline plants near your homes foundation where the soil stays warmer. Feed and water as required through the summer to avoid stress on the plant. A plant that is weak before winter is less likely to survive. Mulch plant roots at freeze up to compensate for low snow cover. Wind breaks will help to reduce wind desiccation in winter.

Often you will see the same plant, provided by different growers, listed as two different zones. Many plant suppliers are from milder climates and are not familiar with how well that item will grow in our area. Better to ask our staff or other gardening friends what success they may have had with the particular plant in question. When it comes close, many plants can be coaxed to survive if we want them bad enough. You are the best judge of your location, take a look around and see what might help or hinder a plant in winter. There are no guarantees that a specific plant will grow well in any area, it is dependent on the planting of suitable material, the environment and the gardener.

We are often asked where a plant was grown. Where a plant was grown has nothing to do with plant hardiness. Hardiness is determined by genetics and may be influenced by its environment. When it does make a difference however, is in the early spring if the plant was brought in from a warmer zone for resale. These plants need extra care for the first few weeks when there is still a chance of spring frosts (that doesn't happen here does it?). Next spring the plants will be fine because they will come out of dormancy at the correct time for your area.

If you love a challenge, it is very exciting to test the limits and be successful with a plant not considered hardy for your area. Remember: first - zone ratings are based on experience and with the high increase in plant development in recent years, many plants simply have not been tested here; second – plant survival is influenced by many factors that can be changed.

Factors that may increase plant hardiness

- Good snow cover acts like a blanket protecting the plant roots from thawing on a warm day with a rapid refreeze at night. This is especially important for perennials as their upper growth dies off anyway.
- Soil with good tilth (ex. Sandy loam soil) which is what most plants prefer, results in strong and healthy growth and a better ability to tolerate cold.
- Moisture conditions during the summer goes a long way to helping a plant through the winter. A plant that struggles all summer is weak in the fall and often dead in the spring.

Factors that may decrease plant hardiness

- Poor plant health going into winter
- Improper moisture levels in the soil at freeze up. (most plants like to be relatively moist when the ground freezes, but some like to be almost soggy and some like to be drier)
- Compacted soil
- Poor snow cover
- No wind protection
- Freeze thaw cycles in mid to late winter