
UNH Cooperative Extension Info Line Question of the Week

Deicers

Q. What is the best deicer to use near my plants?

A. The best deicer to choose depends not only on protecting plant roots and foliage, but also on the temperature outside and your pocketbook. Deicers are designed to make the removal of ice and snow easier. They melt down through ice and snow, and then spread out underneath. This undercuts and loosens snow so shoveling and plowing can be done. They are most effective when applied before it snows.



There are a number of chemicals used as deicers. Often they are blended together or combined with materials like sand to enhance their performance. Calcium chloride is the most efficient of the deicers; it is also expensive. It is effective at temperatures of -20 F and lower, but can damage plant roots.

Rock salt is the least expensive alternative, effective to about 15 F, but it damages both soils and plants. Potassium chloride is usually used as part of a blend. Also used as a fertilizer, its high salt index means that it has the potential to burn plant foliage and inhibit rooting.

Synthesized from ammonia and carbon dioxide, urea is used primarily as a fertilizer. It has a lower burn potential than potassium chloride. It is effective above 10 F, and is very effective at temperatures of 25 to 30 degrees. Like urea, calcium magnesium acetate is effective at warmer temperatures. It is probably the most commonly available, least toxic option for plants, but is very expensive. Made from dolomitic limestone and acetic acid, it is useful for environmentally sensitive areas. If you are using a deicer primarily near turf, you might want to choose magnesium chloride which has less impact on grass.

Relatively recent is the development of deicers that are carbohydrate-based solutions derived from corn or beets. These products are non-toxic and environmentally safe, but are not yet universally available in retail stores.

Got questions? UNH Cooperative Extension Education Center's Info Line offers practical help finding answers for your lawn and garden questions. Call toll free at 1-877-398-4769, M-F, 9:00 a.m.-2:00 p.m., or e-mail us at answers@unh.edu