Superintendent's Son Will Receive Scholarship

Winning Essayist Tackles Hydrophobic Subject



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Water that is actually infiltrated to plants. Not only does water repellency waste water, it is also harmful to plants.

A major source area for dry spots and water repellence is on golf course greens. Putting greens that are made in accordance with United States Golf Association (USGA) standards must contain a high amount of sand. This sand can often prove troublesome as a varnish develops around the sand Editor's note: Jaron Andrews, the son of superintendent Marvin Andrews of Isleta Eagle Golf Course in Albuquerque, N.M., and a student at the New Mexico Institute of Mining and Technology, is the winter of the second annual Aquatrols Scholarship Essay Contest and receives a \$2,000 stipend for his work. Excerpts of his essay, "Hydrophobic Turfgrass," are featured below. Andrews' entire essay and other winners' works can be found on www.aquatrols.com. The essay competition is open to collegebound children of turf and landscape management professionals. For more information, contact info@aquatrols.com or 800-257-7797.

grains and repels water. Water researchers generally agree that water repellency in soils is caused by a range of hydrophobic organic materials that forms nonpolar "coatings" on soil particles (Conard 2002). This hydrophobic action causes the most common type of water re-

pellence that is associated with turf management.

There are several technological and simple solutions that can be used to treat water repellency. One of the new and more breakthrough techniques is the use of wetting agents or surfactants. As previously mentioned, water's polarity attracts it to molecules that are polar and repels it from nonpolar molecules.

Wetting agents use a combination of nonpolar and polar molecules to help water flow through nonpolar regions and to flow better because of decreased surface tensions (Conard 2002). Surfactants increase the water's capillary action and help the water infiltrate drier areas. Surfactants are also useful because they have added bonuses to their primary use.

Another method that is effective in removing water repellency is aerifica-

tion, which is usually followed by topdressing that fills the holes with sand which is also permeable and aids in water infiltration.

One other solution that is labor intensive but can be used to overcome water repellence is hand-watering.

