

Ohio nursery gets salty problem from big-box development

Runoff from a new Walmart store contaminated Roemer Nursery's irrigation pond

By Kelli Rodda



PJM rhododendrons at Roemer Nursery were damaged from high salt levels. An irrigation pond was contaminated from runoff by a nearby Walmart. Sodium levels in the leaves were 11,500 ppm. The normal sodium range for PJM rhodies is 190-625 ppm.

It was big news for Madison Township, Ohio — a Walmart Supercenter was coming to town. In 2004, the township changed the zoning on a parcel just south of Roemer Nursery to allow construction of the megastore. The 48-year-old nursery on Green Road was getting a high-profile neighbor.

It probably meant more traffic, thought Lisa Ungers, the nursery's general manager.

The nursery's water flow came from the same side of the street as the proposed Walmart, but the city said "it wouldn't be a problem," she said.

By the time the store was complete in 2005, it wasn't cars that worried Ungers, but contamination.

Salty problems

Walmart put in a retention basin, or wet pool, that collects runoff from the roof and parking lot. The wet pool discharges into adjoining wetlands.

When the store was finished, the nursery started seeing an increase in salt levels in the main irrigation pond, Roemer said.

"Initially the electrical conductivity readings would be high in the spring and flush out with the spring rains," she said. "But during the next two years, the rains didn't take care of the problem."

Roemer and her crew started seeing plant damage by 2007, primarily on PJM rhododendrons.

"They're very salt sensitive. We had some other plant losses, but we didn't make the connection at first," she said.

Salt in the wounds

In 2008, the salt content in the main irrigation pond was constantly high. Roemer pulled 24 PJM rhodies — half irrigated with water from the



Roemer Nursery lost 2,200 PJM rhodies due to salt contamination.

contaminated pond and the other half irrigated with clean water. She sent soil and tissue samples of the 24 plants to CLC Labs in Westerville, Ohio. The lab found 11,500 parts per million (ppm) of sodium in the tissue samples irrigated with contaminated water. The normal range for PJM rhodies is 190-625 ppm.

“Our main irrigation pond was rendered useless,” she said.

The main pond is about 7 feet deep and covers ½ an acre.

“We also used the main pond to fill our three back ponds. With a useless main pond, we were forced to refill our well with city water at a cost of up to \$2,400 a week,” she said.

Plan B

Roemer sought help for a resolution from the township, the county and the regional EPA office.

“We found out there’s no regulation for contamination via salt. There are agricultural water standards and drinking-water standards, but the level of salt in our pond doesn’t exceed either one of those standards,” she said.

If Walmart had lined its retention pond and installed storm sewers down Green Road, the problem may have been avoided, she said.

The nursery lost 2,200 PJMs at a wholesale value of \$54,000 from the salt contamination.

Roemer and an attorney are working with Walmart and the store’s counsel on a solution. No complaints or injunc-

tions have been filed against Walmart, according to David Gornick, the nursery’s attorney.

“We’re hopefully and optimistically looking forward to Walmart’s cooperation to resolve this issue before any more loss of inventory or plant death occurs at Roemer Nursery,” Gornick said.

The nursery has made irrigation adjustments such as using more wetting agents, watering for shorter periods (but more frequently) and watering smaller areas of the nursery at a time.


“We had a bid for \$15,000 to connect a

pipe and bypass the contaminated pond. We also looked into drip irrigation, which would reduce water usage by two-thirds, but cost \$160,000,” she said.

Plans have been filed for an Aldi grocery store directly south of the nursery. Ungers fears her back ponds will face the same fate as the main irrigation pond. However, a new NPDES (National Pollutant Discharge Elimination System) permit from EPA may prevent runoff contamination from the new store, she said.

For more: Roemer Nursery, (440) 428-9090; www.roemernursery.com.

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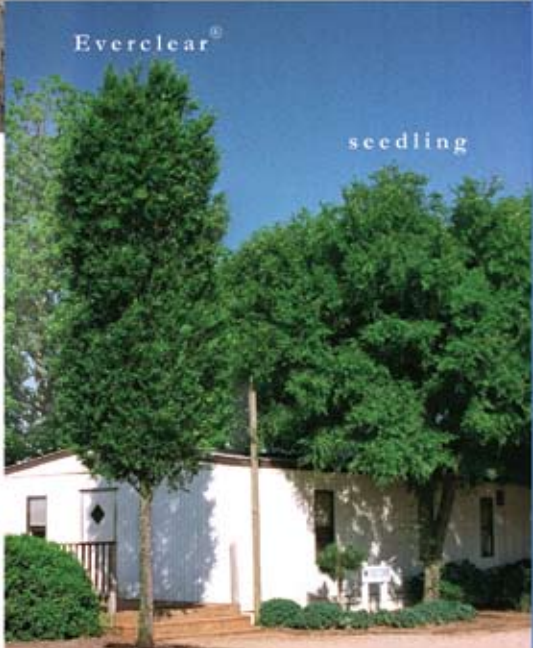
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