



2 N 255 County Farm Rd. West Chicago, IL 60185  
Phone: (312) 668-5537

### PEERLESS FENCE CO.

3N381 Powis Rd.  
West Chicago, IL

- Chain-Link Fencing
- Wood Fencing
- Special Gates
- Driving Range Fencing
- Tee Protection Fencing
- Wood & Steel Guard-Rails
- Golf Course Work Our Specialty

312/584-7710

Hal Laman

"Golf Course Work a Specialty"

### LEMONT PAVING CO.

Lemont, IL 60439

Jim, Tracy, Ray Murphy

257-6701

## WHOLESALE SUPPLIER for



LAKE COOK  
FARM  
SUPPLY

### Landscapers • Nurserymen • Golf Courses

- Turf and Agricultural Chemicals
- Common and Elite Turf Grass Seed
- Union Fork Tools
- Peat Moss — Bark — Mulches
- Root Lowell Sprayers
- Shaws and F.S. Fertilizers

#### CUSTOM BLENDING OF BULK FERTILIZERS OUR SPECIALTY

Pickup or Delivered from our Bulk Fertilizer Plant  
Custom Fertilizer Spreading Available

DISTRIBUTORS OF F.S. PETROLEUM PRODUCTS

**GASOLINE • LUBE OIL • DIESEL FUEL**



**LAKE COOK FARM SUPPLY**

PETROLEUM  
DIVISION  
101 E. MAIN ST.  
LAKE ZURICH, IL 60047  
540-0100

TURF  
DIVISION  
1214W NORTHWEST HWY  
PALATINE, IL 60067  
991-4800

BULK FERTILIZER  
PLANT  
170 CEDAR AVE.  
LAKE VILLA, IL 60046  
356-9600

## Adjusting the pH in your Spray Tank

by Roger H. Ogalla  
BOJO Turf Supply Co.

Soil pH is one of the most important tools a turfgrass manager has. A specific pH range is needed to assure proper release of all the nutrients in the soil. In recent years the pH of the spray tank water has become more important to the turfgrass manager. A specific pH range is needed, but for other reasons.

Many golf courses are irrigating and spraying with water than has a pH of 7.0 or greater. This water usually contains large quantities of Calcium and Magnesium, better known as hard water. Alkaline hydrolysis or breakdown of many pesticides will take place under these conditions. Numerous pesticides, especially carbamates, organophosphates, and systemics lose their effectiveness in water with a high pH. This could explain the 10 days of dollar spot control out of a fungicide which should have given you 25-30 days of control.

How do you know if this is the case with your water? There are many laboratories in the Chicagoland area, which can give you a complete diagnostic review of your water, including a pH reading. In most cases your present soil testing service can also test your water. A quicker and easier way is to purchase your own kit or meter for testing water pH. Litmus paper can also be used, but it does not offer the accuracy or reusability of pH meters. These meters range cost from \$75-100 for pocket size models to several hundred dollars for table top models. The same results can be obtained by either type of meter. Another advantage of having your own meter is the option to test before and after pesticides and acidifiers are added to the spray tank.

How do you adjust the pH once you know it? Several products on the market are good for lowering the pH. Most of these contain either iron, phosphoric acid, sulfur, or a combination of these nutrients. The following charts illustrate various products and how they adjust pH or how they are effected by pH.

### pH Adjustment Chart

Product	Approximate amount per 100 gal. to lower 1 pH point
Balance (Precision Laboratories)	8 oz.
Iron Sulfate	18 oz.
Ferromec (PBI Gordon)	33 oz.
Vinegar	53 oz.
Sulfur F (WA Cleary)	1.56 gal.
Microgreen (Rhône-Poulenc)	2 gal.

### Effects of pH on Pesticides

Chemical		pH	Half-Life
Daconil 2787 (Chlorothalonil)		6	6.8 hours
		7	1.2 hours
		7	10 weeks
Diazinon		8	8 weeks
	Dursban (Chloropyrifos)	7	35 days
		8	1.5 days
Proxol (Trichorfon)		6	3.7 days
		7	6.4 hours
		8	63 minutes
Sevin (Carbaryl)		6	100-150 days
		7	24-30 days
		8	2-3 days
Tersan 1991 (Benomyl)		5.6	30 days
		7	1 day