

tilizers, to prevent damage to the grass plants. Tests have indicated that the amount of fertilizer in water might vary from one-tenth of one per cent to 3 per cent, depending upon the season of the year and the type of plant which is being treated. It is believed that golf-course superintendents should confine their fertilizer irrigation water mixtures to the lower part of this range. In other words, one-tenth of one per cent of fertilizer in water means roughly one pound of fertilizer to 125 gallons of water. It is believed that it will be absolutely safe to use liquid fertilizers on any of the grasses that are grown on golf courses if the concentra-

tion of fertilizer is kept to this level. One may find from his own experience that he can increase the concentration of fertilizer a great deal, but he should certainly start with a relatively low concentration.

Source of Nutrients	Nutrient Content		
	N	P ₂ O ₅	K ₂ O
Ammonium nitrate	33.5	0	0
Ammonium sulfate	20	0	0
Sodium nitrate	16	0	0
Urea	46	0	0
Diammonium phosphate	21	53.8	0
Monoammonium phosphate	12.2	61.6	0
Potassium nitrate	13.7	0	46
Dipotassium phosphate	0	40	53
Monopotassium phosphate	0	51.6	34.2
Muriate of potash	0	0	62

CONSERVING SEED

Probably seed mixtures will cost about 50 per cent more than they did last year. The relatively light 1953 crop of Kentucky bluegrass has increased the demand for other permanent grasses and thus the price for all grasses has gone up. Therefore, these recommendations may be helpful.

1. Buy a mixture that exceeds minimum specifications for permanent grasses.
2. Buy the type of mixture seed that is suited to your needs.
3. Buy no more seed than you need.

4. Prepare the seedbed thoroughly—never sow seed except on a well-prepared seedbed.
5. Seed in early fall (especially in southeastern New York) or in early spring. Don't gamble with off-season seeding.
6. Fertilize your lawn with a complete fertilizer at planting time.

From the Westchester County Farm and Home News, March, 1954.

SUBSCRIBERS TO RESEARCH AND EDUCATION FUND

To assist the USGA Green Section to sponsor research on turf and its management and to help educate turf workers, the following have subscribed to the Green Section's new Research and Education Fund:

- American Cyanamid Co., New York, N. Y.
- Americus Country Club, Americus, Ga.
- Eberhard Anheuser, St. Louis, Mo.
- Augusta Country Club, Augusta, Ga.
- William F. Bell, Pasadena, Cal.
- The Clapper Co., West Newton, Mass.
- G. L. Cornell Co., Bethesda, Md.
- Country Club of Columbus, Ga.
- Bob Dunning-Jones, Inc., Tulsa, Okla.
- Henry C. Glissman, Omaha, Neb.
- Goldthwaite's Texas Toro Co., Fort Worth-Houston-Dallas, Texas
- Golf Course Superintendents Association of America, St. Charles, Ill.
- Highland Country Club, LaGrange, Ga.
- Jacobsen Manufacturing Co., Racine, Wis.

- Harry Kenyon, Sandusky, Ohio
- The Lafkins Golf & Lawn Supply Corp., White Plains, N. Y.
- Marietta Country Club, Marietta, Ga.
- Meadowbrooks Country Club, Atlanta, Ga.
- Merry Grass Nursery, Spring Hill, Ala.
- Mid-Atlantic Association of Golf Course Superintendents, Baltimore, Md.
- Old Orchard Turf Nurseries, Madison, Wis.
- J. C. Olinger Seed Co., Akron, Ohio
- Pensacola Country Club, Pensacola, Fla.
- Ponte Vedra Club, Ponte Vedra Beach, Fla.
- Bernard H. Ridder, Jr., Duluth, Minn.
- River Oaks Country Club, Houston, Texas
- Sedgefield Club, Greensboro, N. C.
- Sewerage Commission of the City of Milwaukee, Wis.
- T. T. Taylor, Harrison, N. Y.
- Timuquana Country Club, Jacksonville, Fla.
- Toro Manufacturing Corp., Minneapolis, Minn.
- Valentine Turfgrass Nursery, Worton, Md.
- Vaughan's Seed Co., Chicago, Ill.
- F. H. Woodruff & Sons, Inc., Milford, Conn.