FERTILIZER COSTS AND AVAILABILITY FOR 1975

D. V. Waddington Department of Agronomy The Pennsylvania State University

Turfgrass fertilizers will continue to increase in price in 1975, but supplies should be adequate to meet the needs of homeowners and turf professionals. To obtain the latest information on cost and availability, I contacted representatives of three major turfgrass fertilizer manufacturers in the U.S. and two of our largest distributors in Pennsylvania. One company had just increased turfgrass fertilizer prices by 12 to 20 dollars per ton. Others anticipated price increases prior to the spring shipping season. There seemed to be good agreement that supplies will be sufficient; however, you may not get the exact grade or ratio you want, and delivery may be delayed. Inventories of some suppliers are small; and if delivery is delayed, be prepared to pay the price at delivery time rather than the price at ordering time.

In case you haven't looked at fertilizer prices lately, here are some examples of what has happened. Urea, which sold for about \$100 per ton a few years ago, is now priced as high as \$400 per ton. Ureaform prices have increased by about 60% in the last two years, and IBDU costs have doubled. The following

price increases have occurred over the last two years:

Cost per ton for 1-4 tons

Time	Ureaform	IBDU
Spring '73	\$320	\$330
Spring '74	375	436
Summer '74	470	566
Winter '75	520	669

These are prices of one supplier. Others may have different prices, but the trends are the same. Increases have not been limited to nitrogen sources. One supplier reported that superphosphate prices had more than doubled, while prices of muriate of potash and sulfate of potash have almost doubled over what they were a few years ago.

A check of complete fertilizers (containing N, P, and K) with 25 to 50% slow-release nitrogen showed increases of 60 to 67% since last spring and 29 to 35% since last July. For example, a 10-6-4 (25% slow-release N) increased from \$130 per ton in the spring of 1974 to \$162 in July, 1974, and to \$212 in January, 1975.

The homeowner, who paid about \$1.10 in 1972 to fertilize 1000 square feet with one major brand, will be faced with \$1.80 for that single feeding of the same material in 1975. Homeowner reaction to the higher costs is anticipated by some suppliers and they expect a decline in purchases.

What can be done to cut fertilizer costs in your 1975 and future budgets? Consider the following factors when planning your fertilizer program. Perhaps

several of them can be used to your advantage.

1. Source of nitrogen. Quick-release (soluble) sources furnish nitrogen at a lower cost than the slow-release sources. The savings is reflected in complete fertilizers as well as the nitrogen materials. If you make a change here, do not forget to adjust the rate and timing to minimize the chances of fertilizer burn and/or overstimulation of growth.

- 2. Source of potassium. The cost per pound of K₂O in muriate of potash (KC1) and sulfate of potash (K₂SO₄) is about 12 and 16 cents, respectively. K₂SO₄ also furnishes sulfur and has a lower salt index than KC1. Are these features needed in your program and are they worth the added cost?
- 3. Secondary and trace elements. May be guaranteed on the label of complete fertilizers or sold alone. Do you have evidence of need soil test, tissue test, deficiency symptoms? Of the trace elements, perhaps the best case can be made for iron fertilization. Sources of iron vary in cost. Can you see the cost differences in the type of response?

4. <u>Different fertilizer grades</u>, <u>but same ratio of N-P-K</u>. (Example: 16-8-8 vs. 10-5-5). All other things being equal, the higher analysis is a better buy due to lower cost per unit of plant food, fewer bags (less

weight) to handle and store, and lower shipping costs.

5. Physical form of mixed fertilizers. Liquid fertilizers cost more than dry products. Blends may be lower priced than granular or pelleted fertilizers manufactured by chemically reacting materials. Separation of materials due to size or density differences is a problem with some blends. Higher costs for products with good physical form and good spreading characteristics may be justified when you consider the problems with distribution of dusty, caked, or extremely lightweight fertilizers especially with spinner-type spreaders.

5. <u>Bulk vs. bagged</u>. Bulk material may offer savings of around \$10 per ton. Some suppliers will deliver in portable bins if storage space is not

available.

7. Quantity purchase. The quantity purchased at one time influences cost. Perhaps you can combine orders with a neighboring business to get a price advantage. Expect a drop-off charge for combined orders.

8. Shipping or delivery charge. This charge is usually involved in quantity discounts. Shipping costs per ton decrease as quantity increases and as

distance decreases. Know the delivered price.

9. Off-season delivery. If you have adequate storage facilities, check on the availability of discounts for winter delivery. Homeowners should look for discounts during early purchase promotions or late in the season.

10. Competitive bidding. Submit specifications to several suppliers to obtain

quotations on their current prices.

11. Soil test. Don't purchase and apply nutrients in excess of the needs.

Soil testing can serve as a guide.

12. Use efficient methods and timings of application. In the past we were often more concerned with time and labor savings rather than efficient use of fertilizer from an agronomic standpoint, especially in the case of nitrogen. Now is the time for adjustments.

13. Planning. Use long-range planning. Order early to help your supplier in

his planning.

We are experiencing difficult times as far as costs are concerned. Fertilizer is not the only thing that has increased in cost and you may have a tough time setting up priorities for your limited budgets. Keep your abacus, slide rule, or calculator handy. As one supplier stated: "This is going to be an especially tough year on the man who has to take his shoes and socks off to count."