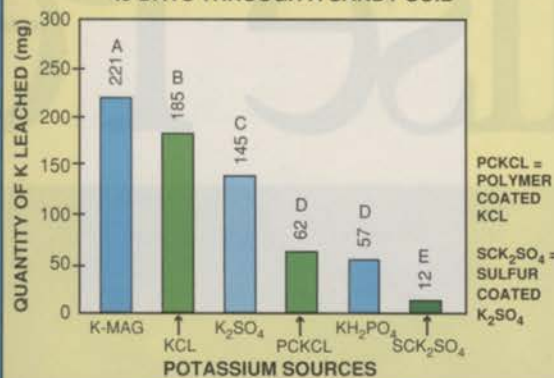


FIG. 2. TOTAL K LEACHED IN 49 DAYS THROUGH A SANDY SOIL



growing on soils testing less than 35 ppm K by the Mehlich I test generally respond to K fertilizer application.

In the recent past, some turfgrass managers have decreased their N:K fertilization ratios from 2:1 to 1:1 and even 1:2 on the premise that K increases top growth, root growth and overall turfgrass quality. Recent research findings, however, do not support the concept of a "magic" N:K fertilization ratio, though they have supported the need for K fertilization of K-deficient soils.

Whether due to turfgrass species or soil and environmental conditions, turfgrasses requiring high rates of N generally require higher rates of K application. There is no real "magic" ratio, but the "historical" 2:1 N-to-K ratio appears to satisfy the needs of bermudagrasses and ryegrasses in the Southeast.

If the soil test indicates that K is needed, application of ½ lb. K/1000 sq. ft. during early spring fertilization, followed by re-application of the same rate every 90 days during the growing season, should adequately supply the K requirements of turfgrass.

Potassium sources differ in their leaching potential in sandy soils and iron-coated clay soils (Fig. 2). Potassium-magnesium sulfate contributes larger amounts of K to the leachate than the other K fertilizer sources. This is attributed to the stronger attraction of Mg than K by soil exchange sites. In general, potassium sulfate leaches less than K potassium chloride whereas, mono-potassium phosphate, a relatively new turfgrass K source, leaches almost no K. Coated K sources also leach K relatively slowly.

Calcium—Turfgrasses can obtain calcium (Ca) from a number of different sources, including exchangeable soil Ca, liming materials and fertilizer sources.

Soil deficiencies occur most frequently in sandy soils, acidic soils (pH less than 5.0) or sodium-saturated soils (rare). True Ca deficiencies are very uncommon in turfgrasses.

Magnesium—Turfgrasses growing on soils testing below 20 ppm Mehlich I extractable magnesium (Mg) usually respond to Mg applications. A Mg deficiency prior to spring growth can be corrected by applying dolo-

mitic lime (if required for soil pH adjustment), magnesium sulfate, or potassium-magnesium sulfate.

Application of 4 lbs. Mg/1000 sq. ft. should correct the deficiency for an entire growing season. Annual monitoring is recommended if a deficiency has been noted.

If the soil Mg status is marginal, high rates of K fertilization can induce Mg deficiencies. There is no "magic" Ca:Mg ratio required in soils for optimum turfgrass growth; rather, the absolute soil test Mg level is of paramount importance.

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Pruning tips for aesthetics, tree health, from Dr. Wade

■ "The key to pruning is knowing the difference between heading and thinning," says Dr. Gary Wade of the University of Georgia. "Thick, dense canopies increase disease and insects, and the plant uses more water."

Wade, in a presentation at the Georgia Turfgrass Conference, told the audience to try and maintain nature's natural plant shape when pruning. You should try to cut right outside the branch collar, and not leave stubs. "When pruning is done properly, there is no need to paint or dress wounds," he noted.

Pruning should be done with a purpose, he said, and should be done "with low maintenance in mind."

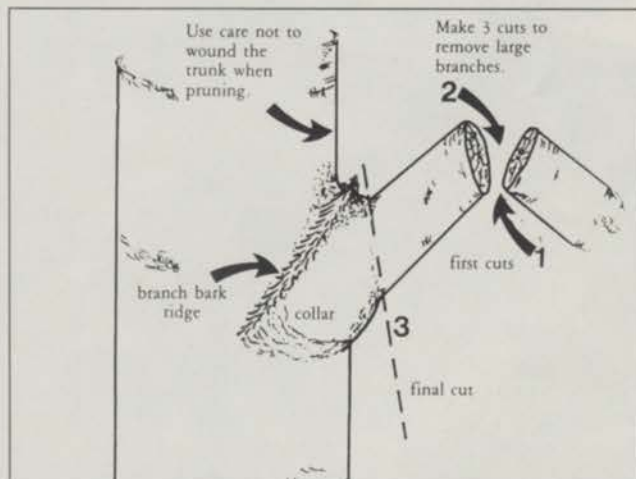
Why prune at all? For various good reasons, including:

- To restore the shape of a tree that is out of proportion.
- To eliminate safety hazards from dead, split, broken and low branches.
- To stop possible interference with electrical lines.
- To reduce potential breeding sites for insects.
- When transplanting, to establish a strong scaffold structure.

In addition, here are Wade's reasons to

prune:

- To maintain the correct size of the plants. This is a common problem with residential landscapes.
- To improve flowering or fruiting performance.
- To repair what Mother Nature has inflicted upon us.
- To rejuvenate plants in the dormant season.



- To increase ornate value in high-priced landscapes.

Some Wade tips:

- Prune six weeks before the start of the new growing season.
- Do not severely prune boxwood or conifers (pine, spruce, junipers).
- Prune in stages over two to three years, if possible.
- Be careful pruning crepe myrtle, the most abused plant in our landscapes.