

TURF TWISTERS

NEWSPAPER REPORTERS

Question: What's the latest information on accidental deaths caused by pesticides in the United States? (Louisiana)

Answer: According to a survey done by *Scientific American* magazine, people in the trades and professions (not directly related to agriculture) thought pesticide deaths were one of the top ten causes of accidental death in this country, yet, apparently, it is not even in the top 100!

IN A TIGHT TURN

Question: When aerifying greens, I have seen two different techniques used; one, the aerifier is operated in a diminishing circular manner around the green; two, it is operated in straight runs across the green. The circular pattern saves time. Any comments? (Utah)

Answer: Yes, indeed! Put us down as "straight arrows." Although we know an aerifier hole is an aerifier hole, the straight line approach has a number of practical advantages. For one, the ever-diminishing circle technique means the aerifier must be turned in a tighter and tighter circle until it can be turned no longer (at which point several straight line passes are made). In making the tighter circles, the aerifier guide wheel (and its other wheels as well) frequently scuff and tear the turf. Not good! Furthermore, circular aerifying calls for extremely careful steering else an overlap or a skip occurs in the pattern of the holes. Also not good! And finally, golfers seem to read, adjust and accept straight line aerifier patterns more readily than those that look like a collander. Circle the perimeter of the green once or twice if you must, but straight-line-it the rest of the way. A quality putting surface is much more important to your reputation than saving time. Don't you agree?

UNDER OXYGEN STRESS

Question: At a recent turf conference, I heard about soil oxygen diffusion rate (ODR). Run that by me again, please. (Nevada)

Answer: Oxygen levels in the voids between soil particles vary over a wide range of concentrations. Flooding, high soil temperatures, incorporation of new organic matter, etc. can lower the soil oxygen concentration. Plant roots require adequate oxygen to respire and carry on metabolic activities. When the soil oxygen diffusion rate is *low*, plants develop a variety of stress symptoms. Unrelieved oxygen stress in the grass plant quickly damages it. Wilting, for example, commonly occurs soon after a low oxygen diffusion rate is reached. Interestingly enough, plants generally decrease water use when oxygen is excluded from the root zone — even if this oxygen exclusion is caused by flooding! In other words, avoid continually wet greens this summer. Do not contribute to a low ODR in your greens.

A Turf Twister in the January/February issue of the GREEN SECTION RECORD mentioned that the USGA publication "A Guide for Green Committee Members" is available free. This was an error. The Guide is available for a charge of 50 cents.