Bill Madigan, Lake Forest Country Club, Detroit, Mich.

I had the distinct pleasure of playing a round of golf at Olympia Fields a couple of weeks ago with the illustrious Roy Nelson, Oscar Miles and Mike Bavier. As I have come to expect, turf and playing conditions at Olympia were superb. I thought I had heard every conceivable excuse for hitting a poor shot, but on the tough 14th hole, Oscar came up with a new one. He hit his tee shot to the left and was under the over-hanging branches of a large tree. A 3 iron was used in order to reach the green or land the ball immediately in front. But, as can happen, Oscar hit a "fat" shot, almost shanking the ball, and wound up on the other side of the fairway in the creek. Forthwith, Oscar said, "Did you guys see that crabapple fall out of that tree and land immediately behind my ball just as the clubhead was going to meet the ball?" Well, as can be imagined, this caused an immediate investigation. No crabapple could be found and some wiseguy pointed out that the tree was a poplar. We all agreed that rarely had we seen crabapples falling from poplar trees. In any event and regardless, Oscar beat us all soundly.

It seems I am having a terrible time getting Tom Guettschow's lead arsenate application situation straight. Another correction. Rather than the 3/16 inch holes which were drilled on the 12 foot steel pipe being placed on 1 inch centers, they were placed on 10 inch centers. This really was a typographical error as I was aware that these holes should be at least 10 inches apart, but Tom was kind enough to call me today, informing me of the error.

MISCELLANY

Anyone can make money, but it takes a wise man to spend it.

Life is hard by the yard, but by the inch it's a cinch.

FIGURING PPM

Most persons do not realize what a part per milliom really means. Unfortunately, some substances are accumulative which makes matters worse. We should have some idea of what some of these things mean or represent, notes the July, 1967, Massachusetts Flower Growers' Association bulletin, which picked up the article from Grower Circle News, '66.

Someone recently put together some facts and figures to indicate what one part per million really represents under various conditions:

One ounce of sand in three and one-fourth tons of cement.
One inch is one ppm of 16 miles.
One minute in 1.9 years.
One ounce of dye in 7,530 gallons.
One square inch in one-sixth acre.
One pound in 500 tons.
One cent in $10,000.
One ounce in 62,500 pounds of sugar.
One-sixteenth inch in a pile one mile high.
How about one-tenth ppm?
One crystal of salt in five pounds.
One drop in 16 gallons.
One inch in 158 miles.
One thickness of a sheet of cellophane compared to the height of the Washington monument.

Here is a simple formula you can use in the greenhouse if tables are not available to you. It is not precisely accurate, but it is certainly close enough for prectical purposes.

Multiply the percent of the element in any given fertilizer by 75. This gives the ppm of one ounce of fertilizer in 100 gallons of water.

For example, ammonium sulfate contains approximately 20 percent nitrogen. Multiply 20 percent by 75, and the answer is 15. This is the ppm nitrogen obtained from one ounce of ammonium sulfate in 100 gallons of water. To determine the number of ounces required to make up a 200-ppm solution, merely divide 200 by the 15. The answer is 13-1/3 ounces.