In compliance with the By-Laws, additional nominations may be made from the floor at the proper time. Voting for this election as well as upon all matters coming before the Annual Meeting can be done in person, by proxy or by the delegate of a district association having the required 60% National membership strength. Proxy form is enclosed for individual use. Please note the proxy form will be honored up to the time the polls are declared closed. Proxies must be checked by the Secretary. To eliminate delay during voting it is suggested that this be done as far in advance as is practical.

LEAD ARSENATE VS CALCIUM ARSENATE FOR PRE-EMERGENT CRABGRASS CONTROL

By Roger A. Brown

Ever since the Midwest Regional Turf Field Days at Purdue University during September, there has been a controversy between the use of Lead Arsenate and Calcium Arsenate for pre-emergence crabgrass control.

Golf courses in the Chicago area have and still use Lead Arsenate for crabgrass, chickweed, and poannua control on both greens and fairways. The average recommendation for Lead Arsenate on crabgrass control is 15 lbs. per 1,000 square feet. Golf course superintendents in the Chicago area have applied different rates and found that they received very good results with 300 lbs.

of Lead Arsenate per acre.

Dr. Daniels of Purdue recommends 25 lbs. of Lead Arsenate per 1,000 square feet and 15 lbs. of Calcium Arsenate per 1,000 square feet. The test plots at Purdue showing the results of these different dosages on crabgrass gave evidence of 99 to 100% control. The two plots that were on exhibit outside of Purdue's field house were applied May, 1956 and showed excellent control through Septembr, 1957. Older tests have shown crabgrass control for a period of five years.

Twenty-five lbs, per 1,000 square feet would equal 1,079 lbs. of Lead Arsenate per acre. This is a far cry from the 300 lbs. per acre used with good results in the Chicago area. The reason for this discrepancy is that in using 25 lbs. per 1,000 square feet, only one application is necessary for complete control. Tests show that Arsenate remains active in the soil for 3 to 5 years. Therefore, it is possible to apply the recommended 25 lbs. over a period of 3 years and still receive the full benefit.

Since the application of 1,000 lbs. of Lead per acre would be far from economical, it is only logical that the superintendents or applicators apply a little at a time until they reach the accumulated amount that would give them the required crabgrass control desired. Once the soil has received an accumulation of 25 lbs. of Lead Arsenate per 1,000, the turf would remain relatively crabgrass free for a period up to five years. However, Dr. Daniels recommends that a follow-up of 4 lbs. per 1,000 once each year to keep the investment of the 25 lbs. good, safe and active.

Many golf course superintendents are reluctant to use Calcium Arsenate for fear of burning their grass. There are low lime Calcium Arsenates on the market, and if Lead and/or Calcium Arsenates are applied properly and in the right dosages there will not be any harm to bent or bluegrass. Calcium is a structural part of many plant issues; root and cell development are depend upon this nutrient. Normally, Calcium is supplied by limestone to control soil acidity. (The writer is not asserting that the Calcium in Calcium Arsenate will

benefit the health of the turf, but just wishes to illustrate that Calcium is a needed and used plant nutrient.) Chemically, Calcium and Lead Arsenate do about the same thing in the soil except it takes less Calcium Arsenate for control. Economically, Calcium is more desirable than Lead Arsenate.

Personal experience is the best indicator as to what should be used on a golf course. Because of this, it would be wise for a test run on Calcium Arsenate leaving a check plot to show results received. By doing this the superintendent will show whether Calcium Arsenate is the product for him to use in his particular case.

Walter Killmer has retired as Superintendent of Ravisloe Country Club. We understand that Walter is to receive his full wages as pension. We want to wish Walter the best of luck and hope he will make a full recovery from his recent operation.

Roy Nelson, formerly of Golden Valley Country Club, Minneapolis, Minnesota, is the new Superintendent at Ravisloe. Roy took over his duties on December 1. We wish to welcome Roy into our district and we know that he will be a credit to our association.

Warren Roseman says that the quail hunting was rough this year and that he was unable to find many of

the flashy little birds.

The weather so far in November and December has been mild. We hope all you builders of tees, greens, etc. have your jobs completed and ready for spring.

