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Answers to turf questions

by Fred V. Grau

Q's and A's

Q.—Ryegrass seems to have commanded new respect. For years it has been downgraded as a component of cool-season turfgrass seed mixtures, relegated mainly to overseeding of warm-season turf for winter color. Now it appears to be a turfgrass in its own right. Can you help us understand this change?

(Maryland)

A.—The answer to this dramatic reversal concerning ryegrass is research which has resulted in the development of new, improved types which answer most of the requirements for good turf. In addition, they blend well with the newer improved bluegrasses which continue to dominate high-quality cool-season turf. The old common perennial ryegrass was downgraded on at least two counts: 1) very hard to cut, 2) highly susceptible to diseases. The new types, including Pelo and Manhattan, dominate the scene because of their resistance to diseases, ease of mowing and their ability to pro-

duce good turf over several years with or without a bluegrass companion. We can look for more good ryegrasses in the future as interest runs high in research circles.

Q.—At our course we are considering the purchase of a mist blower for applying materials to our greens. What is your opinion? Is there something as good or better?

(Virginia)

A.—Mist blowers do not seem to be very practical where air currents are a problem. Drift is a source of loss and a potential hazard where finely-divided droplets are concerned. Hydraulic seeders (Finn, Bowie, Reinco) appear to me to be extremely practical on the golf course. They can be used to apply fertilizers, lime, fungicides, herbicides, seed, wood cellulose fiber mulch on new plantings of seed or stolons, and even for planting grass vegetatively. Hydraulic seeders are multi-purpose. The mist blower must operate in a much narrower range.

Q.—We have heard many times that phosphorus and arsenic conflict, particularly in the control of *Poa annua*. When phosphorus levels are high it seems that arsenicals work rather poorly. Conversely, arsenic becomes more effective when P levels are low. What is the explanation?

(Pennsylvania)

A.—Phosphorus and arsenic are very close together in the Periodic Table, a chart of known chemical elements. Their atomic weights are very similar and can replace the other in many chemical combinations. In the plant cell, P is essential for growth and development. *Poa annua* thrives on a high P diet. Most turf grasses need very little P. When P is deficient and As (arsenic) is introduced, the grass plant takes in As. In the cell this heavy metal element precipitates the proteins which then cannot be translocated to the growing points. The plant

turns yellow, becomes stunted, and eventually dies if the concentration of As is high enough.

Every person likes to be recognized and complimented whether or not he admits it. At Penn State's annual turf conference dinners, I recall the excitement when the one winter course student would be honored by his peers as the outstanding student.

Each year a number of turf students are awarded a scholarship tendered by the Golf Course Superintendents Assn. of America and it would be hard to assess the degree of motivation engendered by these presentations.

At the annual meeting of the American Society of Agronomy, each year a number of Fellows are announced. This is the highest honor that the society can confer on a member.

The Green Section Award is one of distinction granted by the United States Golf Assn.

The Citation of Merit, given to golf course superintendents who prepare their courses for championships, is another well deserved form of recognition.

It was recently announced that Dr. Grau has been named recipient of the Green Section Award of the United States Golf Assn.

At the Mid-Atlantic Turfgrass Conference in January two new forms of recognition were instituted. One consists of a two-day Key Man conference in which the key men on the superintendents' staffs are entertained and given instruction. The other Mid-Atlantic innovation, the first to my knowledge, is the naming of the Superintendent of the Year. The first recipient is Angelo Commarato—and well deserved!

So let the process of deserved recognition continue. Flowers to the living smell much sweeter.



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