MID-ATLANTIC News Letter

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Mid-Atlantic Association of Golf Course Superintendents to aid in the Advancement of the Golf Course Superintendent through Education and Merit

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N E W S L E T T E R E X T R A

Have you ever listened to one of Dr. Fred v. Grau's talks and said to yourself - " I'd sure like to have all that in writing so I could read it and absorb more of it."

The Editors of the Mid-Atlantic "NEWSLETTER" feel that you made such a wish after the Bethesda meeting, so we asked Dr. Grau to put his talk in writing and hereby present it to you in the form of a special "NEWSLETTER" issue.

We express our thanks and appreciation to Dr. Grau for this contribution.

The Editors

HIGHLIGHT FROM LECTURE GIVEN BY DR. FRED V. GRAU on APRIL 7, 1959
BEFORE THE MID-ATLANTIC GOLF COURSE SUPERINTENDENTS' ASSOCIATION
MEETING AT BETHESDA COUNTRY CLUB, BETHESDA, MARYLAND

Of all the things that we do to turf, proper nutrition is of the utmost importance. Dr. Couch, of Penn State, has presented lectures showing the very close relationship between grass diseases and nutrition. For years scientists have sought to provide plants with " a steady, uniform supply of nutrients throughout the season". The " feast and famine " routine with quickly available nitrogen materials actually predisposes grasses to disease attacks. This has been minimized somewhat with frequent light applications of materials which, of course, raises labor costs.

Even though I shall stress nitrogen, it must be clearly understood that everything must be in balance. In general, we shall strive for low phosphorus content, high nitrogen and about half as much potash as nitrogen. Potash is extremely important in producing high-quality turf. It acts as a " cleanser " of the " pipes " (vascular system) which move water and sugars about in the plant. Much so-called " winter-kill " on grass has been diagnosed as Potash Starvation. An excess of phosphorus tends to precipitate the iron in solution. Then we say that the turf is suffering from iron chlorosis, which actually is a phosphorus- induced chlorosis. Sure enough, the iron helps. The iron phosphate that is precipitated clogs the system and the grass suffers from wilt and desiccation. Plenty of available potash tends to correct the situation and helps to prevent disease by aiding in the translocation of materials in the plant. Many cases of brown and black rotted roots have been traced to potash hunger.

It is well-known that turfgrasses that produce no fruit or seeds need much less phosphorus than plants like wheat and corn, which produce fruit or grain. It has been said time and again that most putting greens that have been established for five years or more probably have enough phosphorus in the soil to last them for several years, even though only nitrogen and potash were fed steadily for that length of time. Certainly,