on athletic fields where Big 10 varsity football roughs up the sod. Excess water, often a soggy headache during the peak fall pigskin season, is tackled by vertical slitting.

"Wherever disposal of surface water is a problem, vertical slitting may help," Daniel related. Vertical slitting, he described, is making narrow trenches into which porous materials, such as pea gravel or coarse sand, are placed and then capped with sand or calcined clay. Purdue's football field is slitted with a "Groundsaw" that trenches 20 to 24" deep. The technique is also said to be widely used in low areas on golf greens.

Another tip Daniel revealed for extending the durability of athletic fields is to broadcast light and frequent overseeding with a 5 to 10 lbs./A mixture of bluegrasses just before home games. This helps to make a better sod this season, and extends it into the next, Daniel explained.

## An Idea from Sweden

Hopscotching across the Purdue campus to other test plots, turfmen looked at some utilizing an idea from Sweden involving the placement of small slitted plastic pipes under a layer of sand. This is dirtied at the top with soil, peat, and calcined clay, and used as a thin rootzone. The storage of moisture and nutrients is limited, but that present is readily available to short roots, Daniel revealed. Rootzone depths of from 4 to 12" are being prepared by grad student David Bingaman in a new project being installed.

It's been found, after seven years, the durability of numerous calcined clays appears adequate. Exposure to wear, weather, and chemicals has not caused a rapid deterioration. If soil under calcined clay pulls much of the capillary water out of the calcined clay above it, the rootzone is too drouthy. Where there is a sand layer to reduce capillary pull, adequate moisture is retained.

On their enviable, velvet green experimental putting green, Purdue agronomists exhibited a new and different approach to subsurface irrigation. Here they have large sheets of plastic and slitted plastic tile. Adjustable float valves maintain a reservoir of water in base sand; distribution pipe serves as drainage for excess rain. Laboratory determinations have shown a column of sand placed above a reservoir can be kept moist at the surface. Research of grad students, David Ralston and David Bingaman, is



Merits of Anhauser Dwarf were closely examined in this plot at Purdue.



Kathryn House, popular agronomy department secretary, registered over 200 Field Day participants, welcoming back oldtimers, some of whom have attended all held to date.

utilizing one-square-meter plots of this experimental green to determine reservoir depth, rootzone depth, exact rootzone texture needed, and possible mixes which can be used for this. Results of these experiments are being anticipated with keen interest.

Practical adaptability of much of what visitors saw on either of the two days, each of which was an exact carbon of the other, may be years away, but some of the findings may be available for use in 1967, such as the availability of seed for Anhauser dwarf bluegrass.

Next year, the Midwest Turf Field Days will be split, with one being held late in July and the other early in October.

## Don't Cut Grass Too Short

Leave enough grass leaf surface each cutting to provide food to support the plant and develop a strong root system, reminds Colorado State University extension horticulturist, Charles M. Drage.

Extra fertilizer, more frequent watering, and more intense management will be required if grass is cut closer, the plant expert cautions.

"If grass is permitted to grow taller than the usual height, cut it back to its regular height gradually, not at one clipping. And keep your mower sharp," Drage suggests.