



Micah Woods, Ph.D.
micah@asianturfgrass.com
Twitter: @asianturfgrass

(turfgrass talk)

Measuring clipping yield from putting greens

Greenkeeping, at its core, is about controlling the growth rate of the grass. To get the desired green speed or the maximum disease resistance or the fastest divot recovery without too much thatch production, one must adjust the growth rate of the grass. An easy technique for monitoring the growth rate is measuring the clipping yield from golf course putting greens.

The only equipment required is a plastic bucket with volume marks on the side. A typical bucket, marked in liters, is shown in the photo accompanying this column. The person mowing greens can empty the clippings into the bucket, shake until the clippings are level, and then record how many liters of clippings were mowed from the green. It is customary to correct the clipping yield for the size of the green, expressing the clipping yield as volume per area, usually as liters per 100 square meters of green surface.

What is the purpose of measuring clipping yield? These data can be used for a number of things. Because different mowers are usually used on the course, it can be useful to check the yield across the course to find out whether



This plastic bucket is being used to measure the clipping yield on this putting green. Photo by Micah Woods

all the mowers are set up the same way. By measuring the clipping yield, one can track the effect of fertilizer applications, and get some idea of when the growth rate changes and fertilizer re-application may be required.

One can also use these data to measure the influence of plant growth regulators such as trinexapac-ethyl to evaluate the effect of weather and maintenance practices on growth, to see whether greens situated in different microclimates have different growth rates, and to track clipping yield for special events. For example, under tournament conditions, it is usually desirable to have a very slow growth rate, because that leads to more consistent conditions through the day. Also, when the grass is growing slowly, the greens have the potential to be faster.

The normal amount of clippings will vary depending on the golf course, the season, the type of grass and the desired growth rate. A busy course needs to have a faster growth rate to recover from traffic damage. A course without much play doesn't need as much growth.

Let's say that the normal growth rate at a golf course is 5 liters of clippings per 100 square meters per day. During a tournament, the ball may roll better through the day if the clipping yield is less than 1 liter per 100

square meters per day. By tracking how the clipping yield changes and how fertilizer, irrigation and plant growth regulators affect the clipping yield, one can prepare for special events or tournaments with consistency and precision.

There are other ways to measure clipping yield too — measuring the mass of clippings is one way, and keeping track of the number of times the mower baskets need to be emptied is another. I think the easiest and most consistent way to measure as part of routine golf course maintenance is to note the volume of clippings.

Micah Woods, Ph.D., is chief scientist at the Asian Turfgrass Center (www.asianturfgrass.com) and an adjunct assistant professor in the department of plant sciences at the University of Tennessee.