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## Turfgrass management in Southeast Asia 18

Micah Woods gives an insight into a different type of turf management



For someone accustomed to the grasses of more temperate regions, these tropical grasses appear quite coarse, but these are the grasses that are adapted to regular mowing in this type of climate

**At Bangkok, the average high temperature never drops below 31°C, and the average low temperature is always more than 20°C. As I write this, it is the end of this year's rainy season, when in an average year about 1200mm of rain will fall at Bangkok from May to October.**

**At Singapore the average annual rainfall, spread more evenly throughout the year, is closer to 2400mm! Compare that with London and its 600 mm average**

annual rainfall, or Glasgow with its 900 mm, and one quickly realises that Southeast Asia may be a suitable location for a holiday, but it is quite a different land challenge to manage turfgrass.

When I first visited Southeast Asia in 1999, I saw that there were many golf courses here, but essentially nothing in the way of greenkeeper education, or turfgrass research, or independent advisory services to greenkeepers or golf clubs. In 2000 I joined the Asian Turfgrass Centre with the goal of providing some of

those services, and I also promised Scott MacCallum that I would write an article about greenkeeping in Southeast Asia. Greenkeeping in Southeast Asia is so different from in Britain, and I thought a description of some of these differences

could be of interest to the readership of Greenkeeper International.

**What Grasses Are Used on Golf Courses**

The primary grasses used here are hybrid bermudagrasses (Cyn-

odon spp.), manisgrass (*Zoysia matrella*), and/or paspalum (*Paspalum vaginatum*), and broadleaf carpetgrass (*Axonopus compressus*).

For someone accustomed to the grasses of more temperate regions, these tropical grasses appear quite coarse, but these are the grasses that are adapted to regular mowing in this type of climate. One

doesn't find much in the way of open meadows in Southeast Asia. The climate vegetation here would be a tropical woodland, so to maintain turfgrass on golf courses takes

a different mentality than in other parts of the world. The goal here is actually to keep a vigorously growing turf, because of the climate of soil. For someone accustomed to the grasses of more temperate regions, these tropical grasses appear quite coarse, but these are the grasses that are adapted to regular mowing in this type of climate.

The amount of water and fertilizer used on courses in Asia is considerably more than would typically be used in Europe. This is because of the different grass types used, the weather, and the need to keep the grass growing to prevent it being overtaken by

**WIDE PHOTO: The Blue Canyon Golf Club**

**LESS DESIRABLE SPECIES.** For nitro-

gens in Southeast Asia, the average

golf course would use 400 to 600

kg N/ha on greens, and perhaps

200 to 400 kg N/ha on fairways

and roughs. And when it comes to

water, there is a high evapotranspiration

(ET) rate because of the sun

intensity close to the equator, and

during dry weather the daily ET is

about 7 mm per day. Some types of

grass can survive with deficit irrigation

less than their full replacement of

ET, but when that happens growth

will slow, so only a very skilled

greenkeeper can manage this

type of climate.

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Cover shows photography of Blue Canyon In Thailand



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