Bul. Agron. 23 (1) : 32-41(1995)

PENGARUH DOSIS PACLOBUTRAZOL TERHADAP PERTUMBUHAN VERTIKAL DAN KEPADATAN PUCUK SERTA PERTUMBUHAN AKAR RUMPUT GOLF BERMUDA *Tifdwarf (Cynodon dactylon x C. transvaalensis)*[1)]

The Effect of Paclobutrazol Application on Vertical Growth, Shoot Density and Root Growth of Bermuda Tifdwarf

Oleh :

Andreas Kristanto[2)] dan Aris Munandar[3)]

ABSTRACT

Possibility of growth retardant application on tropical turfgrass to substitute or to reduce mowing intensities, while keeping the root growth, was studied. An experiment to study the effect of six level (0, 0.5, 1.0, 2.0, 3.0 and 4.0 kg/ha in 1,000 l solution/ha) of paclobutrazol application on shoot and rootgrowth was set up.

The result showed that within 10-66 days after apllication paclobutrazol retarded shoot growth. A tolerable visual damage occured on turfgrass treated with 0.5-1.0 kg paclobutrazol/ha and more severe ones occured when treated with 2.0 or more kg paclobutrazol. One advantage of paclobutrazol application occured in this experiment was that the root growth was not affected by this PGR application while the shoot growth was suppressed.

Paclobutrazol application changed turfgrass morphology and anatomy. Microscopic observation showed that increment of stem diameter might due to the increment in cell and pith size. Relative size (in diameter) of 10 cells around the pith of 0, 0.5, 1.0, 2.0, 3.0 and 4.0 kg paclobutrazol/ha were 1.0, 1.1, 1.2, 1.3, and 1.4 respectively.

---

1) Sebagian dari skripsi penulis pertama
2) Mahasiswa Jurusan Budi Daya Pertanian IPB
3) Staf Pengajar Jurusan Budi Daya Pertanian IPB