

M. HILMAN JAUHARI. Respon Pertumbuhan Dan Hasil Beberapa Varietas Ubijalar (*Ipomoea batatas* (L.) Lam) Terhadap Pemberian Pupuk Kandang Sapi Di Lahan Pasir Pantai Selatan DIY. Di bawah bimbingan Ir. Ami Suryawati, MP dan Ir. Tutut Wirawati, M.Si

ABSTRAK Penelitian ini bertujuan untuk mengetahui interaksi beberapa varietas ubijalar dan dosis pupuk kandang sapi terhadap pertumbuhan dan hasil ubijalar, menentukan varietas ubijalar yang pertumbuhan baik dan mempunyai daya hasil tinggi, mendapatkan dosis pupuk kandang sapi yang tepat untuk meningkatkan pertumbuhan dan hasil ubijalar. Penelitian dilaksanakan di Desa Srigading Dusun Ngepet Kabupaten Bantul DIY pada bulan Mei sampai Agustus 2014. Penelitian dilakukan dengan percobaan lapangan yang disusun dalam Rancangan Petak Terbagi (*Split Plot Design*) secara faktorial 4 x 4. *Main Plot* (Petak utama) adalah jenis varietas ubijalar yaitu Papua Solosa, Sari, Kidal, Lokal Bantul. *Sub Plot* (anak petak) adalah dosis pupuk kandang sapi yaitu D1 (20 ton/ha), D2 (25 ton/ha), D3 (30 ton/ha), D4 (35 ton/ha). Parameter pengamatan meliputi panjang sulur primer, jumlah sulur primer, berat kering brangkasan tanaman, jumlah total umbi per tanaman, bobot umbi total per tanaman, bobot umbi total per petak, bobot umbi total per ha, panjang umbi, diameter umbi, kadar gula. Analisis data dilakukan secara statistika dengan menggunakan analisis ragam taraf 5%, dan uji beda rata-rata berdasarkan Jarak Berganda Duncan (DMRT) pada taraf 5%. Hasil analisis sidik ragam menunjukkan tidak terdapat interaksi antara macam varietas ubijalar dengan dosis pupuk kandang sapi. Varietas Lokal Bantul memberikan hasil nyata lebih baik dibandingkan Papua Solosa, Sari, dan Kidal pada panjang sulur primer umur 28 HST dan jumlah sulur primer umur 14 HST. Varietas Lokal Bantul, Sari, dan Kidal memberikan hasil nyata lebih baik dibandingkan Papua Solosa pada jumlah umbi per tanaman. Varietas Papua Solosa, Sari, Kidal, dan Lokal Bantul memberikan hasil yang sama pada bobot umbi per tanaman. Dosis pupuk kandang sapi 20, 25, 30, 35 ton/ha memberikan hasil yang sama terhadap panjang sulur primer, jumlah sulur primer, jumlah umbi total per tanaman, bobot kering brangkasan tanaman, bobot umbi total per tanaman, bobot umbi total per petak, bobot umbi total per ha, panjang umbi, diameter umbi, dan kandungan gula. Kata kunci : ubijalar, varietas, pupuk kandang sapi, lahan pasir xii

M. HILMAN JAUHARI. Growth Respons and Results Several Varieties of Sweet Potato (*Ipomoea batatas* (L.) Lam) Against Granting Cow Manure In South Beach Sand Land DIY. Supervised by Ir. Ami Suryawati, MP and Ir. Tutut Wirawati, M.Si

ABSTRACT This study aims to determine the interaction of several varieties of sweet potato and dose of cow manure on the growth and yield of sweet potato, sweet potato varieties that determine good growth and have a high yield, getting the dose right cow manure to improve the growth and yield of sweet potato. The experiment was conducted in the village of Hamlet Ngepet Srigading Bantul district of Yogyakarta in May to August 2014. The study was conducted with a field trial plots were arranged in the draft Divided (*Split Plot Design*) 4 x 4 factorial. Main plot is a type of sweet potato varieties namely Papua Solosa, Sari, Kidal, Bantul Local. Sub-Plot is a dose of cow manure that D1 (20 tons / ha), D2 (25 tons / ha), D3 (30 tons / ha), D4 (35 tons / ha). Parameters include the long tendrils primary observations, the number of primary tendrils, stover dry weight of the plant, the total number of tubers per plant, total tuber weight per plant, total tuber weight per plot, total tuber weight per ha, long tubers, tuber diameter, sugar content. The data were analyzed using analysis of variance statistical level of 5%, and the mean difference test based on Duncan's Multiple Range (DMRT) at 5% level. Results of

analysis of variance showed there was no interaction between a wide variety of sweet potato with a dose of cow manure. Bantul local varieties gives markedly better results than Papua Solosa, Sari, and Kidal on the length of the primary vine age 28 HST and the spiraling number of primary aged 14 HST. Bantul local varieties, Sari, and the Kidal gave markedly better results than Papua Solosa on the number of tubers per plant. Varieties Papua Solosa, Sari, Kidal, and Bantul Local give the same result in tuber weight per plant. The dose of cow manure 20, 25, 30, 35 tons / ha gave similar results to the primary tendrils length, number of primary tendrils, the total number of tubers per plant, dry weight of stover plant, total tuber weight per plant, total tuber weight per plot, total tuber weight per ha, tuber length, tuber diameter, and sugar content. Keywords: sweet potato, variety, cow manure, sand land