

INTISARI

Penelitian ini bertujuan untuk mengetahui produksi dan risiko produksi usahatani sayuran semi organik dan konvensional serta faktor-faktor yang mempengaruhinya; mengetahui tingkat efisiensi (teknis, alokatif dan ekonomi) usahatani semi organik dan konvensional serta sumber-sumber penyebab terjadinya inefisiensi; mengetahui perilaku petani sayuran semi organik dan konvensional terhadap risiko produksi serta faktor-faktor yang mempengaruhinya. Penelitian dilakukan terhadap 40 petani sayuran semi organik dan 79 petani sayuran konvensional di Kabupaten Semarang yang diambil secara acak sederhana. Estimasi produksi dan risiko produksi menggunakan model fungsi produksi logaritma natural Cobb-Douglas dengan regresi *Ordinary Least Square*; fungsi produksi *stochastic frontier* dengan metode *Maximum Likelihood Estimation* untuk mengetahui efisiensi teknis, alokatif, ekonomi dan inefisiensi teknis; model Moscardi & de Janvry untuk menganalisis perilaku petani terhadap risiko. Hasil penelitian menunjukkan bahwa: nilai produksi usahatani sayuran semi organik lebih tinggi 45,49% dari nilai produksi usahatani sayuran konvensional. Tenaga kerja berpengaruh positif dan nyata terhadap produksi sayuran semi organik. Benih, pupuk organik, pupuk kimia, tenaga kerja dan luas lahan berpengaruh positif dan nyata terhadap produksi sayuran konvensional, sedangkan pestisida kimia berpengaruh negatif dan nyata. Pestisida bersifat *risk decreasing* pada usahatani sayuran semi organik, sedangkan pupuk organik bersifat *risk decreasing* pada usahatani sayuran konvensional. Rata-rata efisiensi teknis, alokatif, dan ekonomi usahatani sayuran semi organik adalah 0,5369; 1,5935 dan 0,5709 sedangkan rata-rata efisiensi teknis, alokatif dan ekonomi usahatani sayuran konvensional adalah 0,7572; 0,8677 dan 0,6296. Usahatani semi organik secara teknis, alokatif dan ekonomi belum efisien. Usahatani sayuran konvensional secara teknis dan alokatif sudah efisien, namun secara ekonomi belum efisien. Jenis tanaman sayuran yang ditumpangsarikan berpengaruh nyata menurunkan inefisiensi teknis usahatani sayuran semi organik sedangkan pendidikan berpengaruh nyata menurunkan inefisiensi teknis usahatani sayuran konvensional. Perilaku petani sayuran semi organik dan konvensional terhadap risiko produksi adalah netral.

Kata kunci: efisiensi, organik, perilaku-risiko, produksi-sayuran, risiko

ABSTRACT

This study aims to determine production and production risk semi-organic and conventional vegetable farming, and the determinant factors, determine the level of efficiency (technical, allocative and economic) semi-organic and conventional farming and sources causes of inefficiency; determine the attitude and its influence factors among the farmers toward production risk. The study was conducted on 40 of semi-organic and 79 of conventional vegetables farmers in Semarang District. Estimation of the production and production risk used the natural logarithm Cobb Douglas production function, stochastic frontier production function to determine the efficiency of technical, allocative, economic and technical inefficiency; Moscardi & de Janvry models to analyze the farmer's attitudes toward risks. The results showed that the value of semi-organic production was higher significantly of 45.5% than the conventional one. Labor had positive effect significantly on semi-organic vegetables production. Seeds, organic fertilizer, chemical fertilizer, labor, and land area had positive effect significantly on conventional vegetables production, while chemical pesticides had negative effect significantly. Pesticides were a decreasing risk in semi-organic vegetables farming, while organic fertilizer was a decreasing risk in conventional one. The average efficiency of technical, allocative and economy of semi-organic vegetables farming were 0.5369; 1.5935 and 0.5709; the average efficiency of technical, allocative and economy of conventional vegetables farming were 0.7572; 0.8677 and 0.6296.. Intercropping vegetables type reduced significantly inefficiency of technical in semi-organic vegetables farming, education reduced significantly inefficiency of technical in conventional vegetable farming. The attitude of semi-organic and conventional vegetables farmers toward production risk was risk neutral.

Keywords: efficiency, organic-vegetable, production, production-risk, risk-aversion