

Penerapan Fertigator Otomatis Nirdaya Dalam Budidaya Cabai Dan Padi Varietas IPB 12 S Untuk Meningkatkan Ketahanan Pangan Desa Wingkomulyo

(Application of an Automatic Powerless Fertigator in the Cultivation of Chili and Rice Varieties of IPB 12 S to Increase Food Security in Wingkomulyo Village)

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ABSTRAK

Program dosen mengabdikan pulang kampung Institut Pertanian Bogor tahun 2025 melibatkan 5 orang dosen, 2 orang mahasiswa pascasarjana dan petani dan kelompok PKK. Kegiatan yang dilaksanakan yaitu diseminasi hasil inovasi varietas unggul nasional padi tipe baru IPB 12 S, cabai rawit varietas Bonita dan Fertigator Otomatis Nirdaya (FONi) di desa Wingkomulyo, Kecamatan Ngombol, Kabupaten Purworejo, Propinsi Jawa Tengah. Luas area sawah di desa Wingkomulyo 33 ha, dengan sistem pengairan yang baik. Metode pelaksanaan meliputi koordinasi pelaksanaan program, demplot penanaman padi dan cabai. Penanaman padi dilakukan dengan jarak tanam 30 x 30 cm, bibit umur 14 hari. Dosis pemupukan per hektar yang ditebar adalah urea 150 kg, NPK 15-10-12 sejumlah 400 kg dan NPK 16-16-16 sejumlah 95 kg, dan pupuk silika 1 L. Pertumbuhan tanaman fase vegetatif sampai fase berbunga sangat baik, namun tanaman rebah menjelang panen akibat hujan deras dan angin kencang. Beberapa komponen produksi, yaitu rata-rata jumlah anakan produktif (13.0) dan rata-rata jumlah gabah per malai (141.7) serta produksi (6,0 ton GKP per ha) masih dibawah potensi hasil varietas IPB 12 S yang tertera pada SK Pelepasan Varietas. Demonsrasi penanam cabai rawit varietas Bonita dengan menggunakan teknologi FONi dengan jumlah 20 pot. Pindah tanam cabai dilaksanakan pada umur bibit 6 minggu. Pemupukan menggunakan ABMix khusus untuk cabai. Pertumbuhan awal cabai sangat baik, namun pada umur 2 bulan setelah pindah tanam terjadi serangan virus, sehingga produksi tanaman kurang optimal. Kegiatan diseminasi diterima dengan antusias oleh masyarakat desa Wingkomulyo dan pemerintah daerah Kecamatan Ngombol.

Kata kunci: anakan produktif, Bonita, Ngombol, pupuk silika

ABSTRACT

The Bogor Agricultural University community service program involved 5 lecturers, 2 postgraduate students, farmers, and the PKK group. The activities carried out were the dissemination of the innovations in the new type of national superior rice variety IPB 12 S, the Bonita variety of cayenne pepper, and the Powerless Automatic Fertigator (FONi) in Wingkomulyo village, Ngombol District, Purworejo Regency, Central Java Province. The rice field area in Wingkomulyo village is 33 hectares, with a good irrigation system. The implementation method includes coordination of program implementation, demonstration plots for rice and chili planting. Rice planting was carried out with a spacing of 30 x 30 cm, 14-day-old seedlings. The fertilizer dose per hectare was 150 kg of urea, 400 kg of NPK 15-10-12 and 95 kg of NPK 16-16-16 and 1 L of silica fertilizer. The growth of plants from the vegetative phase to the flowering phase was very good, but the plants fell before harvest due to heavy rain and strong winds. Several production components, namely the average number of productive tillers (13.0) and the average number of grains per panicle (141.7) as well as production (6.0 tons of GKP per hectare) were still below the potential yield of the IPB 12 S variety stated in the Variety Release Decree. Demonstration of planting cayenne pepper variety Bonita using FONi technology with a total of 20 pots. Transplanting chilies was carried out when the seedlings were 6 weeks old. The fertilizer used ABMix specifically for chilies. The initial growth of chilies was very good, but at the age of 2 months after transplanting a virus attack occurred, so that plant production was less than optimal. The dissemination activity was received enthusiastically by the Wingkomulyo village community and the Ngombol District government.

Keywords: Bonita, Ngombol, productive tillers, silica fertilizer