

## INTISARI

Lahan pasir pantai merupakan lahan marginal bagi sektor pertanian. Ketersediaan lahan pasir pantai yang luas membuatnya dimanfaatkan untuk pertanian. Salah satu pemanfaatan tersebut yaitu penanaman bawang merah. Penggunaan agrokimia yang berlebih pada budidaya bawang merah dapat beresiko timbulnya kerusakan tanah dan air. Peluang mengatasi agrokimia ini dapat dilakukan dengan pemanfaatan sampah organik, diantaranya kompos daun dan arang sekam. Penelitian ini bertujuan untuk mengetahui pengaruh kompos daun dan arang sekam untuk produksi bawang merah di lahan pasir pantai Samas, Bantul, Yogyakarta. Rancangan percobaan dilakukan dengan RCBD faktorial 3 aras x 4 aras, dimana arang sekam dengan dosis 10 ton/ha, 20 ton/ha, 30 ton/ha dan kompos daun 10 ton/ha, 20 ton/ha, 30 ton/ha dan 40 ton/ha. Pupuk dasar yang diberikan berupa pupuk kandang sapi sebesar 14,3 ton/ha. Pengambilan sampel dilakukan seminggu setelah pengaplikasian perlakuan di lahan penelitian. Panen dilakukan pada umur 7MST. Hasil yang didapatkan menunjukkan penambahan arang sekam dan kompos daun menaikkan PH, DHL, C Organik, KPK, K tersedia, K total, P tersedia, P total. Disamping itu perlakuan tidak mempunyai berbeda secara nyata atas hasil pengamatan agronomis dengan perlakuan petani menggunakan agrokimia. Pengamatan agronomis tersebut berupa tinggi tanaman, berat kering tajuk, akar, umbi serta diameter umbi. Produksi tertinggi mencapai 11,8 ton/ha pada perlakuan arang 20 ton/ha dengan kombinasi kompos daun 20 ton/ha.

Kata kunci: lahan pasir pantai, bawang merah, arang sekam, kompos daun



## ABSTRACT

*Beach sand is marginal land for the agricultural sector. The availability of large sandy land makes it used for agriculture. One of these uses is the planting of shallots. Excessive use of agrochemicals in shallot cultivation can lead to the risk of soil and water damage. The opportunity to overcome this agrochemical can be done by utilizing organic waste, including leaf compost and husk charcoal. This study aims to determine the effect of leaf compost and husk charcoal for shallot production in the sandy land of Samas beach, Bantul, Yogyakarta. The experimental design was carried out with factorial RCBD 3 levels x 4 levels, where husk charcoal at doses of 10 tonnes / ha, 20 tonnes / ha, 30 tonnes / ha and leaf compost 10 tonnes / ha, 20 tonnes / ha, 30 tonnes / ha and 40 ton / ha. The basic fertilizer given is cow manure at 14,3 tons / ha. Sampling was carried out a week after the application of the treatment in the research field. Harvesting was done at the age of 7 week after plant. The results obtained showed that the addition of husk charcoal and leaf compost increased PH, electrical conductivity, Organic C, CEC, available K, total K, available P, total P. In addition, the treatment did not significantly differ from the results of agronomic observations with the treatment of farmers using agrochemicals. The agronomic observations were plant height, shoot dry weight, roots, tubers and tuber diameter. The highest production reached 11.8 tons / ha in the charcoal treatment of 20 tons / ha with a combination of leaf compost of 20 tons / ha.*

*Key words:* Sandy land, shallots, husk charcoal and leaf compost