

PENGARUH BANGUNAN PENGENDALI LINGKUNGAN TERHADAP KADAR GARAM DI LAHAN PASIR PANTAI SAMAS KABUPATEN BANTUL

INTISARI

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Provinsi DIY memiliki lahan pasir pantai seluas 3.300 hektar atau 4% luas wilayah yang terbentang sepanjang 110 km di pantai selatan Indonesia. Pemanfaatan lahan pasir pantai Samas untuk pertanian telah dimulai sejak tahun 1986. Kecepatan angin, kadar garam dan evaporasi merupakan kendala utama dalam pertanian di lahan pasir pantai samas. Di perlukan adanya upaya dalam bentuk teknologi bangunan pengendali untuk mengatasinya.

Penelitian ini dilakukan dengan mengukur kadar garam, kecepatan angin, tinggi gelombang dan laju evaporasi pada lahan pasir pantai samas. Kadar garam yang tertangkap diukur menggunakan alat *conductivity meter*. Kecepatan angin menggunakan anemometer digital dan laju evaporasi menggunakan pan evaporimeter. Hubungan antara kecepatan angin dengan kadar garam dan evaporasi dengan kadar garam menggunakan kurva regresi linear.

Hasil penelitian menunjukkan bahwa hubungan kecepatan angin dan kadar garam pada kedua bangunan pengendali adalah signifikan dan positif dalam bentuk linear. Sedangkan hubungan tinggi gelombang dengan kadar garam dan evaporasi dengan kadar garam tidak begitu signifikan. Bangunan Pengendali UV memiliki efektivitas 60.01% dan bangunan pengendali paranet sebesar 37.5%.

Kata kunci : lahan pasir, bangunan pengendali, kadar garam, kecepatan angin, evaporasi, tinggi gelombang

ENVIRONMENT CONTROL BUILDING EFFECT'S TO SALINITY RATE AT SANDY LAND COASTAL AREA OF SAMAS BANTUL

ABSTRACT

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DIY province is having 3.300 hectare of sandy land area or 4% of its total area which span 110 km at Indonesia's southern coastline. The use of Samas sandy land coastal area have been started seince 1986. Wind speed, salinity rate and evaporation are the main obstacles at Samas sandy land coastal area. It needs some efforts, in a form of control building technology to overcome those problems.

This research is done with measuring salinity rate, wind speed, wave heights, and evaporation rate at Samas sandy land coastal area. Salinity rate is measured using conductivity meter, wind speed using digital anemometer and evaporation rate using pan evaporimeter. The connection between windspeed and salinity rate, evaporation and salinity rate, both using linear regression curve.

Research results shows that the connection between windspeed and salinity rate at both of the control buildings are significant and positive in a linear form. As for the connection between wave heights and salinity rate, evaporation and salinity rate, both are not too significant. UV control building have 60.01% effectivity and paranet control building have 37.5% effectivity.

Keyword : sandy area, control building, salinity rate, wind speed, evaporation, wave heights