

INTISARI

PENGARUH BEBERAPA JENIS TUMBUHAN BAWAH TERHADAP KONDISI TANAH DAN PERTUMBUHAN CEMARA UDANG (*Casuarina equisetifolia* var. *incana*) DI PANTAI BERPASIR HITAM

Oleh:

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Penanaman pohon pada kawasan pantai berpasir sangat penting untuk mendukung pemanfaatan lahan di belakang pantai. Kawasan tersebut memiliki kondisi lingkungan yang kurang mendukung untuk tumbuhnya vegetasi diantaranya kecepatan angin, suhu tanah dan salinitas yang tinggi serta kondisi tanahnya yang terbatas. Penelitian ini bertujuan untuk mengetahui perbedaan kondisi tanah dengan adanya beberapa jenis tumbuhan bawah serta pengaruhnya terhadap pertumbuhan Cemara Udang.

Cemara Udang yang ditanam bersama beberapa jenis tumbuhan bawah diamati tinggi, diameter, dan persen hidupnya sebulan sekali selama 6 bulan. Perbedaan kondisi tanah diketahui dengan analisis tanah di laboratorium.

Kandungan bahan organik, pH, unsur N dan P tersedia serta KPK tanah lebih tinggi dengan adanya tumbuhan bawah. Kadar lengas tanah meningkat dengan adanya *Krangtungan* (*Ipomoea pes-caprae* Sweet) dan *Widuri* (*Calotropis gigantea* (Wild.) Dryand) namun berkurang dengan adanya *Boboan* (*Gynandropsis gynandra* Briq.) dan Rumput *Grinting* (*Spinifek littoreus* (Brum. F) Mer.). Rumput *Grinting* justru mengurangi ketersediaan hara K dalam tanah. Persen hidup Cemara Udang pada musim hujan bila ditanam bersama tumbuhan bawah lebih tinggi dibanding tanpa adanya tumbuhan bawah. Pada musim kemarau keberadaan Rumput *Grinting* menyebabkan persen hidup Cemara Udang paling rendah. Rerata tinggi dan diameter Cemara Udang lebih tinggi jika ditanam bersama tumbuhan bawah

Kata kunci : pantai berpasir hitam, tumbuhan bawah, Cemara Udang

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ABSTRACT

THE EFFECT OF SOME GROUND COVER SPECIES TO SOIL CONDITION AND THE GROWTH OF CASUARINA (*Casuarina equisetifolia* var. *incana*) ON BLACK-SANDY COAST

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Planting trees on sandy soil in coastal area is very important to be implemented immediately to support the land use in seacoast. Sandy soil in coastal area has many constraints of this site consist of high velocity of wind, high temperature of the soil, high salinity and also less soil condition. The aim of this research was to know the effect of some ground cover species to soil condition and growth of *Casuarina equisetifolia* var. *incana*.

High, diameter, and life percentage *C. equisetifolia* var. *incana* planted along with ground cover species was measured once a month for 6 month. Different of soil condition was known with soil analysis at laboratory.

The content of organic matter, pH, available substance of N and P, and exchange capacity of soil cation were higher related to the existence of ground covers. Soil moisture was increasing related to *Ipomoea pes-caprae* Sweet and *Calotropis gigantea* (Wild.) Dryand as opposed to the site that was grown by *Gynandropsis gynandra* Briq. and *Spinifek littoreus* (Brum. F) Mer. In fact, *Spinifek littoreus* (Brum. F) Mer. had contribution to decreased the availability of organic substance of K in the soil. Life percentage of *C. equisetifolia* var. *incana* in rainy season was higher when it was planted along with ground covers. But in dry season, life percentage of *C. equisetifolia* var. *incana* planted along with *Spinifek littoreus* (Brum. F) Mer. was the lowest. The average of height and diameter of *C. equisetifolia* var. *incana* was also higher when it was planted along with ground covers.

Key word: black-sandy coast, ground cover, *Casuarina equisetifolia* var. *incana*

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