

RINGKASAN

Penurunan produktivitas padi disebabkan oleh beberapa factor dan salah satu faktor utamanya adalah air. Fenomena kekeringan merupakan efek dari pemanasan global atau karena siklus tahunan juga menyebabkan pertanian padi terancam gagal. Fakta tersebut menggambarkan betapa pentingnya air bagi pertumbuhan tanaman padi. Tujuan penelitian ini adalah 1) Mengetahui pengaruh ketersediaan air bagi pertumbuhan dan hasil 3 galur murni padi. 2) Mengetahui perbedaan pertumbuhan dan hasil antara 3 galur murni pada taraf ketersediaan air.

Penelitian ini menggunakan Rancangan Acak Kelompok Lengkap (RAKL). Faktor yang dicoba ada dua, yaitu galur (G7, G27, G37) dan kondisi air (anaerob, aerob basah, aerob kering). Perlakuan yang dicoba meliputi: ketersediaan air tergenang (anaerob), aerob, dan kering. Variabel yang diamati antara lain: panjang akar, tinggi tanaman, jumlah anakan produktif, panjang malai, jumlah gabah total pertanaman, bobot 1000 biji, persentase gabah isi per rumpun, bobot gabah kering per rumpun, total penggunaan air.

Hasil penelitian menunjukkan bahwa pertumbuhan dan hasil pada tiap-tiap galur yang diuji paling optimal adalah pada kondisi anaerob.

SUMMARY

A decrease of productivity of rice plants is caused by several factors and one of the main factor is the water. The phenomenon of drought is the effect of global warming or it is because the annual cycle can make rice farming threatened to fail. These facts illustrate the importance of water for the growth of the rice plant. The purpose of this study were 1) Determine the influence of water availability for growth and yield of 3 pure strain of rice. 2) Know the difference between growth and yield of three pure strains on the level of water availability.

This study uses a randomized block design Complete (RAKL). There factors that tried namely (G7, G27, G37) and water condition (anaerob, wet aerob, dry aerob). Attempted treatment includes: the availability of standing water (anaerobic), aerobic, and dried. The variables were observed among others: root length, plant height, number of productive tillers, panicle length, number of total grain crop, the weight of 1000 seeds, the percentage of filled grain per panicle, grain dry weight per hill, total water use.

The results showed that the growth and yield in each strain attempted is the most optimal in anaerobic conditions.