

INTISARI

Tebu merupakan salah satu tanaman penghasil gula yang digunakan di Indonesia. Luas areal tebu di lahan sawah beririgasi di Jawa semakin berkurang. Kini areal tebu di lahan sawah tinggal sekitar 40 %, selebihnya telah beralih ke lahan kering. Pada fase perkecambahan, kebutuhan air tanaman rendah, kemudian mulai meningkat pada fase pertunasan dan mencapai puncaknya pada fase pemanjangan batang. Tujuan penelitian ini, akan dilihat ketahanan bibit tebu terhadap cekaman saat fase perkecambahan dan proses beradaptasinya kembali tebu saat fase pertumbuhan tunas dari kondisi tercekam. Penelitian dilakukan pada bulan Mei hingga September 2016 di Kebun Percobaan Banguntapan, Fakultas Pertanian, Universitas Gadjah Mada. Rancangan Percobaan yang digunakan yaitu Rancangan Acak Lengkap (RAL) dengan 2 faktor. Faktor pertama yaitu kadar lengas yang terdiri dari 4 aras yaitu 100%, 80%, 60%, dan 40%. Faktor ke dua adalah klon tebu yaitu klon PS 862, PS 864, Kidang Kencana (KK), Bululawang (BL), dan VMC 76-16. Hasil menunjukkan bahwa perlakuan pengaturan kadar lengas mampu mempengaruhi pertumbuhan tebu dengan menurunnya angka pertumbuhan beberapa klon ketikakadar lengas diturunkan hingga 40%. Klon KK menjadi klon yang memiliki hasil terendah dan kurang tahan terhadap perlakuan cekaman kekeringan

Kata kunci: tebu, kadar lengas, klon

ABSTRACT

Sugarcane is one of sugar producing plants used in Indonesia. The area of sugar cane in irrigated rice fields in Java is decreasing. Now the area of sugarcane in the paddy field left about 40%, the rest has moved to dry land. In the germination phase, the crop water requirement is low, then begins to increase in the tillering phase and reaches its peak in the stem extension phase. The purpose of this study will see the endurance of sugarcane seedlings to the stress during the germination phase and the process of recovery during the growth phase. The study was conducted from May to September 2016 at agriculture land of Banguntapan, Faculty of Agriculture, Universitas Gadjah Mada. Experiment Design used ithe Randomized Completed Design (RCD) with 2 factors. The first factor was moisture content consisting of 4 levels such as 100%, 80%, 60%, and 40%. The second factor was the sugarcane clones of PS 862, PS 864, Kencana Kencana (KK), Bululawang (BL), and VMC 76-16. The results showed that moisture treatment was able to influence the growth of sugarcane plants with decreasing growth rate of some clones when the moisture content was decreased to 40%. Kidang Kencana seems to be the most sensitive to drought stress.

Keywords : sugarcane, moisture content, clone