

RINGKASAN

Berdasarkan karakter metabolisnya, klon PB 260 termasuk dalam klon *quick starter* (QS) (Boerhandhy dan Amypalupy, 2011). Pada umumnya klon metabolisme tinggi mempunyai kecepatan biosintesis lateks yang lebih tinggi dibandingkan dengan klon metabolisme sedang maupun rendah. Disamping itu, tipe metabolisme klon menentukan pola produksi selama siklus eksploitasi. Klon-klon dengan tipe metabolisme tinggi atau sering disebut dengan klon *quick starter* mempunyai produksi awal yang cukup tinggi, yang dapat digunakan sebagai referensi untuk mendapatkan pengembalian biaya investasi lebih cepat (Agustina dan Herlinawati, 2017).

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrai stimulan cair terhadap karakter fisiologis dan produksi lateks klon PB 260 (klon *quick starter*). Penelitian dilaksanakan dengan menggunakan Rancangan Acak Kelompok non faktorial dengan perlakuan S0 : tanpa stimulan, S1 : stimulan cair ethephon 2,5%, S2 : stimulan cair ethephon 3,5%. Variabel pengamatannya ialah kadar sukrosa (mM), fosfat anorganik (mM), thiol (mM), pH, indeks penyumbatan dan hasil lateks (g/p/s).

Hasil penelitian menunjukkan bahwa pemberian stimulan memberikan pengaruh terhadap karakter fisiologi dan produksi. Perlakuan pemberian stimulan cair pada konsentrasi 2,5% menunjukkan adanya respon terhadap karakter fisiologi karet seperti kandungan sukrosa menurun, kandungan Pi meningkat, kandungan thiol meningkat, kandungan pH lateks meningkat dan menurunkan nilai indeks penyumbatan. Produksi lateks sangat rendah walau karakter fisiologi pada kisaran normal yang diakibatkan tanaman terserang penyakit kering alur sadap (KAS) sehingga aliran lateks terhenti.

Kata kunci : Tanaman karet, klon PB 260, stimulan, karakter fisiologi

SUMMARY

Based on its metabolic character, clone PB 260 is included in the quick starter (QS) clone (Boerhandhy and Amypalupy, 2011). In general, the high metabolic clones had a higher rate of latex biosynthesis than the medium and low metabolic clones. In addition, the metabolic type of the clone determines the pattern of production during the exploitation cycle. Clones with high metabolic types or often referred to as quick starter clones have a fairly high initial production, which can be used as a reference to get a faster return on investment costs (Agustina and Herlinawati, 2017).

This study aimed to determine the effect of liquid stimulant concentration on physiological characters and latex production of PB 260 clones (quick starter clones). The research was carried out using a non-factorial randomized block design with treatment S0 : without stimulant, S1 : liquid stimulant ethephon 2,5%, S2 : liquid stimulant ethephon 3,5%. The observed variables were levels of sucrose (mM), inorganic phosphate (mM), thiol (mM), pH, blockage index and latex yield (g/p/s).

The results of the study showed that giving stimulants had an effect on physiological and production characters. The treatment of giving liquid stimulants at a concentration of 2,5% showed a response to the physiological characteristics of rubber such as decreased sucrose content, increased Pi content, increased thiol content, increased latex pH content and decreased blockage index value. Latex production is very low even though the physiological character is in the normal range due to plants being attacked by tapping groove dry disease (DTG) so that latex flow stops.

Key words : Rubber plant, PB 260 clone, stimulant, physiological character