

ABSTRACS

One of the reason for low national tea productivity is no innovation in term of tea clone which depicted by the old age of tea shrubs, therefore new clones must be developed to answer some problems in tea cultivation. Superior tea which is propagated vegetatively, must have high inheritance to its properties. The objective of this observation was to determine the estimated genetic parameters of the second vegetative propagation (V2) of several tea clones at several planting locations. The research was conducted in July-December 2017 at PT Pagilaran afdeling Sanderan, Kayulandak, and Andongsili. The clones used are PGL10, PGL11, PGL12, and PGL15. The study used Splitplot with two factors: tea clones and planting locations. The data of observation is the yield components for 4 times were analyzed by ANOVA with further test of Scottnott and AMMI . The results showed that the length and width of the leaves, yield potential, stem length, dry weight of leaves, peko and stalk, fresh weight of Peko, and the amount of Peko had high genetic value. Fresh Leaf Weight and Fresh Weight of Stalks have low genetic value. Leaf Length, Potential Power Yield, Dry Weight Leaves and Peko tend to have environmentally influenced growth. Leaf Width, Stalk Length, Dry Weight of Stalk, Fresh Weight of Peko and Total Peko have growth that is not affected by the environment. Genetic parameters on clone components that interact with the environment have the best growth in PGL10, 11 and 12 clones. The genetic parameters on the clone components that do not interact with the environment have the best growth in 10 and 12 clones. PGL11, 12, and 10 grow optimal in Kayulandak while PGL15, 12 and 10 grow optimally in Andongsili and Sanderan.

Key words: PGL, yield components, genetic parameters, interactions

INTISARI

Salah satu sebab rendahnya produktivitas teh nasional adalah umur perdu yang sudah tua sehingga perlu pengembangan varietas baru yang dapat dibudidayakan secara nasional. Teh unggul yang diperbanyak secara vegetatif, harus memiliki sifat dengan heritabilitas tinggi. Penelitian bertujuan mengetahui nilai duga parameter genetik hasil perbanyakan vegetatif kedua (V2) beberapa klon teh pada beberapa lokasi penanaman. Penelitian dilaksanakan di bulan Juli-Desember 2017 di PT Pagilaran afdeling Pagilaran, Kayulandak, dan Andongsili. Klon yang digunakan yaitu PGL10, PGL11, PGL12, dan PGL15. Penelitian menggunakan rancangan petak terbagi dengan dua faktor yaitu klon teh dan lokasi penanaman. Pengamatan dilakukan terhadap komponen hasil 4 kali pemetikan dan dianalisis dengan ANOVA serta uji lanjut Scottnott dan AMMI. Parameter genetik yang diamati meliputi heritabilitas dalam arti luas, koefisien keragaman genotip, dan koefisien keragaman fenotip. Hasil penelitian menunjukkan Panjang Daun, Lebar Daun, Potensi Daya Hasil Kering, Panjang Tangkai, Berat Kering Daun, Berat Kering Peko, Berat Kering Tangkai, Berat Segar Peko, dan Jumlah Peko memiliki nilai heritabilitas dan keragaman genetik tinggi. Berat Segar Daun dan Berat Segar Tangkai memiliki nilai heritabilitas dan keragaman genetik rendah. Komponen Panjang Daun, Potensi Daya Hasil Kering, Berat Kering Daun dan Berat Kering Peko cenderung memiliki pertumbuhan yang dipengaruhi lingkungan. Komponen hasil Lebar Daun, Panjang Tangkai, Berat Kering Tangkai, Berat Segar Peko dan Jumlah Peko memiliki pertumbuhan yang tidak dipengaruhi lingkungan. Kayulandak cenderung memberikan lingkungan pertumbuhan optimal bagi klon PGL-11, sementara Andongsili dan Sandaran cenderung memberikan lingkungan pertumbuhan optimal bagi klon PGL-15. Klon PGL-10 dan PGL-12 dapat dikembangkan di semua lahan Pagilaran

Kata kunci: PGL, komponen hasil, parameter genetik, interaksi