

ABSTRACT

The research aims to 1) Obtain data on physiological, morphological and yield performance of KKM 22, RCC 70, and RCC 71 cocoa clones that were rehabilitated by ring grafting and side grafting techniques and 2) determine the most suitable rehabilitation technique for KKM 22, RCC 70, and RCC cocoa clones. 71 based on physiological performance, morphology and productivity. Field trials were run using a nested environment design. The factors tested were grafting techniques and cocoa clones. The grafting techniques are side grafting and ring grafting. While the factors for cocoa clones were KKM 22, RCC 70, and RCC 71. The grafting technique acted as a nest, while the nesting clones used the grafting technique. Data on physiological, morphological and yield characteristics of cocoa plants were analyzed using α 5% ANOVA, and continued with the Fisher LSD test if there is a significant difference between treatments. The research results provide information that physiological, morphological performance, yield components and productivity of cocoa stands from ring grafting were higher when compared to side grafting because stands resulting from side grafting in the linkage area appeared delayed incompatibility. The rehabilitation program using the ring grafting technique is recommended to be applied when compared to side grafting because the results were good for all clones, namely KKM 22, RCC 70, and RCC 71.

Keywords :cocoa, rehabilitation technique.

INTISARI

Penelitian bertujuan untuk 1) memperoleh data keragaan fisiologis, morfologis dan hasil tanaman kakao klon KKM 22, RCC 70, dan RCC 71 yang direhab dengan teknik okulasi cincin dan sambung samping dan 2) menentukan teknik rehabilitasi yang paling sesuai untuk tanaman kakao klon KKM 22, RCC 70, dan RCC 71 berdasarkan pada keragaan fisiologis, morfologis dan produktivitas. Percobaan lapangan dijalankan menggunakan rancangan lingkungan tersarang. Faktor yang diuji yaitu teknik penyambungan dan klon kakao. Teknik penyambungan yaitu sambung samping dan okulasi cincin. Sedangkan faktor klon kakao yaitu KKM 22, RCC 70, dan RCC 71. Teknik penyambungan bertindak sebagai sarang, sedangkan klon bersarang pada teknik penyambungan. Data keragaan fisiologis, morfologis dan hasil tanaman kakao dianalisis menggunakan Analisis Sidik Ragam (ANOVA) α 5%, dan dilanjutkan dengan uji Fisher LSD Test jika terdapat beda nyata antar perlakuan. Hasil penelitian memberikan informasi bahwa keragaan fisiologis, morfologis, komponen hasil dan produktivitas tegakan kakao asal okulasi cincin lebih tinggi jika dibandingkan dengan sambung samping karena tegakan hasil sambung samping pada area pertautannya muncul inkompatibilitas tertunda. Program rehab dengan teknik okulasi cincin lebih direkomendasikan untuk diterapkan jika dibandingkan dengan sambung samping karena hasilnya baik pada semua klon yaitu KKM 22, RCC 70, dan RCC 71.

Kata kunci : kakao, teknik rehap.