

## INTISARI

Karakteristik agronomis dan fenologi merupakan aspek penting dalam kegiatan budidaya tanaman kakao, terutama sebagai modal awal penentuan kombinasi poliklonal. Informasi mengenai kesesuaian kombinasi poliklonal berdasarkan karakteristik agronomis dan fenologi tanaman kakao masih terbatas, oleh karena itu dibutuhkan kajian lebih lanjut. Penelitian ini bertujuan untuk mengidentifikasi karakteristik agronomis dan fenologi beberapa klon unggul kakao, sehingga dapat ditentukan kombinasi poliklonal terbaik. Penelitian dilakukan pada Januari hingga Juni 2025 di Kebun Kaliwining, Pusat Penelitian Kopi dan Kakao Indonesia, di wilayah Kabupaten Jember, Provinsi Jawa Timur. Tanaman kakao berasal dari hasil perbanyakan sambung pucuk dengan umur enam tahun. Penelitian dirancang dengan Rancangan Acak Kelompok Lengkap (RAKL) faktor tunggal terdiri dari tujuh klon sebagai perlakuan dengan tiga blok sebagai ulangan. Setiap plot terdapat lima tanaman sampel. Parameter karakteristik agronomis yang diamati meliputi komponen pertumbuhan dan komponen hasil. Data iklim diperoleh dari stasiun klimatologi Pusat Penelitian Kopi dan Kakao Indonesia. Hasil penelitian menunjukkan bahwa terdapat perbedaan karakteristik agronomis pada tujuh klon kakao yang diuji. Diketahui klon ICCRI 09, MCC 02, Monika 1, Monika 2, dan Sulawesi 1 memiliki karakteristik agronomis dan performa hasil terbaik. Setiap klon memiliki sensitivitas yang berbeda terhadap faktor iklim. Penentuan kombinasi poliklonal disesuaikan berdasarkan kebutuhan dan preferensi petani. Rekomendasi kombinasi poliklonal dengan buah sepanjang tahun/kontinu adalah ICCRI 09, MCC 02, dan Sulawesi 1. Rekomendasi kombinasi poliklonal dengan puncak buah/musiman adalah MCC 02, Monika 1, dan Monika 2.

Kata kunci: Klon kakao; karakteristik agronomis; fenologi; poliklonal.

## ***ABSTRACT***

Agronomy characteristics and phenology were important aspects in cocoa cultivation, especially as an initial basis for determining polyclonal combinations. Information regarding the compatibility of polyclonal combinations based on agronomic characteristics and phenology was still limited; therefore, further study was needed. This study aimed to identify agronomic characteristics and phenology in several superior cocoa clones in order to determine the best polyclonal combinations. The study was conducted from January to June 2025 at the Kaliwining experimental station of Indonesian Coffee and Cocoa Research Institute (ICCRI), Jember, East Java. The cocoa plant was originated by top grafting seedling with the age of six years. Design of experiment was randomized complete block design (RCBD) single factor consisted of seven clones as treatment with three replications. Each plot consisted of five sample plants. The parameter observed was agronomic characteristics consisted of the growth components and yield components. Climate data were obtained from the ICCRI climatological station. The results of experiment showed that there were difference in agronomic characteristics within seven cocoa clones tested. ICCRI 09, MCC 02, Monika 1, Monika 2, and Sulawesi 1 showed the best of agronomic characteristics and yield performance. Each clone has different sensitivity to climate factors. The determination of polyclonal combinations was tailored farmers' needs and preferences. The recommended of polyclonal combinations with continuous fruiting were ICCRI 09, MCC 02, and Sulawesi 1. The recommended of polyclonal combinations with seasonal or peak fruiting were MCC 02, Monika 1, and Monika 2.

Key words: Cocoa clones; agronomic characteristics; phenology; polyclonal.