

Pola Segregasi Tanaman Cabai Hias (*Capsicum annuum* L.) F<sub>2</sub> Hasil Persilangan Kultivar  
Peter Pepper Dengan Royal Black

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Tanaman cabai sebagai tanaman hias dapat dinikmati estetikanya baik dari bentuk daun, bentuk tanaman, bunga maupun buahnya yang beraneka warna. Melalui persilangan tetua kultivar Peter Pepper dan Royal Black didapatkan cabai F<sub>1</sub> yang mengalami segregasi pada generasi F<sub>2</sub>. Segregasi menandakan adanya keragaman genetik yang dapat diseleksi dan dievaluasi sesuai dengan tujuan pemuliaan. Tujuan penelitian ini yaitu mengetahui pola segregasi karakter kualitatif dan kuantitatif pada tanaman cabai hias generasi F<sub>2</sub> hasil persilangan Peter Pepper dengan Royal Black. Penelitian ini dilaksanakan di Kebun Tridharma, Kecamatan Bangutapan, Kabupaten Bantul, Provinsi Daerah Istimewa Yogyakarta pada bulan November 2015 – April 2016. Metode yang digunakan penelitian ini adalah metode *single plant*. Karakter yang diamati dibedakan menjadi dua yaitu karakter kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa dari 23 karakter kualitatif yang diamati, 21 karakter mengikuti nisbah yang diharapkan dan 2 karakter tidak mengikuti nisbah yang diharapkan. Pola segregasi populasi F<sub>2</sub> karakter kualitatif mengikuti pola segregasi 1 : 2 : 1 pada karakter habitus pertumbuhan tanaman, habitus percabangan, bentuk daun, warna daun, warna mahkota, warna kotak sari, posisi stigma terhadap anther, bentuk ujung buah, bentuk penampang melintang buah, dan jumlah lokul buah. Karakter warna batang, warna daun, orientasi bunga, warna tangkai sari, orientasi buah mengikuti pola segregasi 12:3:1. Karakter kuantitatif yang diamati sebanyak 9 karakter, 6 karakter tidak mengikuti distribusi normal, 3 karakter yang mengikuti distribusi normal yaitu panjang buah, panjang tangkai buah, dan bobot 1000 biji, diduga jumlah gen pengendali karakter tersebut di atas dikendalikan oleh 2 gen.

Kata Kunci : cabai hias, segregasi, kualitatif, kuantitatif, gen pengendali

**Pattern of Segregation Ornamental Chili (*Capsicum annum* L.) F<sub>2</sub> crossing cultivars**

***Peter Pepper with Royal Black***

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Pepper plants as ornamentals should have a high value for their esthetic shape of the leaves, the shape of plants, flowers and colour of fruit are variegated. The pattern of qualitative and quantitative character segregation in F<sub>2</sub> generation. F<sub>2</sub> population established from the crossing of *Peter pepper* and *Royal Black* were evaluated in order to determine the ornamental pepper plants of crossbred *Peter Pepper* with *Royal Black*. This research was conducted at Tridharma field, Banguntapan, Bantul, Yogyakarta in November 2015 - April 2016. Single plant method were used in research. Qualitative and quantitative characters were observed to determine the pattern of segregation and predict the number of gene control. The results showed that of the 23 observed qualitative characters, 21 characters following the expected ratio and the two characters do not follow the expected ratio. Segregation pattern F<sub>2</sub> populations qualitative characters following the pattern of segregation 1: 2: 1 on the character of plant growth habit, branching habit, leaf shape, leaf colour, corolla colour, filament colour, stigma exertion, fruit shape at blossom end, fruit cross-sectional corrugation, and number of locules. Character stem colour, leaf colour, flower position, anther colour, fruit position follows the pattern of segregation 12: 3: 1. Quantitative characters were observed as many as nine characters, which is six characters do not follow a normal distribution, and three characters that follow a normal distribution, namely the length of fruit, fruit pedicel length, and 1000-seed weight. Those three characters are supposed to be controlled by two genes.

Key word : segregation, qualitative, quantitative, gene control