

**Yusi Hidayah 16230110061** Pengaruh Umur Panen dan Lama *Curing* Terhadap Viabilitas Benih Semangka (*Citrullus vulgaris*), di bawah bimbingan: Prof. Dr. Sumardji, S.P., M.P. dan Yushi Mardiana, S.P., M.Si.

## RINGKASAN

Semangka (*Citrullus vulgaris*) merupakan tanaman bersulur merambat yang termasuk dalam family cucurbitaceae dan tergolong tanaman semusim.. Tanaman semangka berbentuk terna yang merambat dengan menggunakan sulur atau alat pembelitnya yang berbentuk pipih. Tanaman semangka merupakan tanaman *monociouse* yaitu tanaman yang memiliki bunga jantan dan betina. Bunga jantan muncul sebelum bunga betina dan jumlahnya lebih banyak dari bunga betina. Bunga betina yang terserbuk sempurna akan berkembang menjadi buah (Kinansih,2013). Tingkat dan kualitas produksi semangka di Indonesia masih tergolong rendah. Perkembangan produksi tanaman semangka di Indonesia tahun 2012 mencapai 515 536 ton. Namun pada tahun 2013 produksi semangka hanya mencapai 460.628 ton (Badan Pusat Statistik, 2014). Tujuan penelitian untuk mengetahui mengetahui pengaruh umur panen dan waktu *curing* terhadap viabilitas benih semangka (*Citrullus vulgaris*).

Rancangan percobaan yang digunakan pada penelitian ini adalah Rancangan Acak Kelompok (RAK) dengan perlakuan faktorial (4x4) dan diulang sebanyak 3 kali Faktor pertama adalah umur panen (P) P1 = Umur panen 35 hari setelah polinasi (HSP), P2 = Umur panen 40 hari setelah polinasi (HSP), P3 =Umur panen 45 hari setelah polinasi (HSP), P4 =Umur panen 50 hari setelah polinasi (HSP). Faktor kedua adalah *curing* (C) : C1 = Tidak dilakukan *curing* / 0 hari, C2 = *Curing* selama2 hari, C3 = *Curing* selama 4 hari, C4 = *Curing* selama 6 hari.

Hasil penelitian menunjukkan bahwa 1. Terjadi interaksi pada perlakuan umur panen dan lama *curing* terhadap viabilitas benih semangka pada variabel pengamatan daya berkecambah benih. Interaksi yang paling signifikan terjadi pada perlakuan P3C3 (umur panen 45 HSP dan lama *curing* 4 hari).2. Terdapat pengaruh sangat nyata perlakuan umur panen pada variabel pengamatan jumlah benih perbuah, perlakuan umur panen P3 (45 HSP) menunjukkan hasil paling optimum, namun lama *curing* tidak memberikan pengaruh nyata pada variabel pengamatan jumlah benih perbuah. 3. Tidak terdapat interaksi signifikan kombinasi perlakuan umur panen dan lama *curing* pada variabel berat benih perbuah, namun masing-masing perlakuan yaitu umur panen memberikan pengaruh sangat nyata pada variabel pengamatan berat benih perbuah, level perlakuan dengan hasil paling optimum yaitu P3 (45 HSP) dan lama *curing* memberikan pengaruh yang nyata terhadap variabel pengamatan berat benih perbuah, perlakuan paling optimum yaitu C4 (*curing* 6 hari).

**Yusi Hidayah 16230110061** Effect of Harvest Age and *Curing* Time on Watermelon (*Citrullus vulgaris*) Seed Viability, under the guidance of: Prof. Dr. Sumardji, S.P., M.P. and Yushi Mardiana, SP, M.Si.

## SUMMARY

Watermelon (*Citrullus vulgaris*) is a vine that belongs to the family Cucurbitaceae and is classified as an annual plant. Watermelon plants are herbaceous which propagates by using tendrils or a flat-shaped winding device. The watermelon plant is a *monoecious plant*, that is, a plant that has both male and female flowers. Male flowers appear before female flowers and are more numerous than female flowers. The female flowers that are pollinated perfectly will develop into fruit (Kinansih, 2013). The level and quality of watermelon production in Indonesia is still relatively low. The development of watermelon production in Indonesia in 2012 reached 515 536 tons. However, in 2013 watermelon production only reached 460,628 tons (Central Statistics Agency, 2014). The aim of the research was to determine the effect of harvest age and *curing* time on the viability of watermelon (*Citrullus vulgaris*) seeds.

The experimental design used in this study was a randomized block design (RBD) with factorial treatment (4x4) and repeated 3 times. The first factor was harvest age (P) P1 = harvest age 35 days after pollination (DAP), P2 = harvest age 40 days after pollination (DAP), P3 = Harvest age 45 days after pollination (DAP), P4 = Harvest age 50 days after pollination (DAP). The second factor is *curing* (C): C1 = No *curing* / 0 days, C2 = *Curing* for 2 days, C3 = *Curing* for 4 days, C4 = *Curing* for 6 days.

The research results show that 1. There was an interaction in the treatment of harvesting age and *curing* time on the viability of watermelon seeds in the observation variable of seed germination. The most significant interaction occurred in the P3C3 treatment (harvesting age of 45 DAP and *curing* time of 4 days). 2. There was a very real influence of the harvest age treatment on the observation variable for the number of seeds per fruit, the harvest age treatment P3 (45 DAP) showed the most optimum results, however the *curing* time did not have a real influence on the observation variable for the number of seeds per fruit. 3. There is no significant interaction between the treatment combinations of harvest age and *curing* time on the variable seed weight per fruit, but each treatment, namely age of harvest, has a very real influence on the observation variable of seed weight per fruit, the treatment level with the most optimum results is P3 (45 DAP) and *curing* time had a real influence on the observation variable for seed weight per fruit, the most optimal treatment was C4 (*curing* 6 days).