

## RINGKASAN

Penanganan pasca panen penting untuk mempertahankan waktu kesegaran dan keragaan serta kualitas bunga. Pulsing merupakan perlakuan pengawetan bunga segar setelah panen untuk memberi bekal sumber nutrisi pada bunga dan melindungi tangkai bunga dari serangan mikroorganisme penyebab penyumbatan pembuluh pada tangkai bunga. Penelitian ini bertujuan 1) menentukan kombinasi ekstrak daun sirih dengan nira tebu yang paling tepat terhadap masa kesegaran bunga potong gerbera. 2) mengetahui pengaruh waktu lama perendaman yang terbaik untuk mempertahankan masa kesegaran bunga potong gerbera. 3) mengkaji kombinasi larutan ekstrak daun sirih dengan nira tebu serta lama perendaman untuk memperlambat kelayuan bunga potong gerbera.

Penelitian telah dilaksanakan di Laboratorium Agronomi dan Hortikultura, Fakultas Pertanian, Universitas Jenderal Soedirman mulai bulan Mei sampai bulan Juli 2017. Penelitian ini menggunakan Rancangan Acak Kelompok Faktorial dengan 2 faktor dan 3 ulangan. Faktor pertama merupakan kombinasi larutan ekstrak daun sirih dan nira tebu yang terdiri dari 4 kombinasi yaitu kontrol, 5% ekstrak daun sirih + 10% nira tebu, 10% ekstrak daun sirih + 10% nira tebu, 15% ekstrak daun sirih + 10% nira tebu. Faktor kedua merupakan waktu lama perendaman yang terdiri dari 3 taraf uji coba yaitu 3jam, 6jam dan 9jam. Data yang diperoleh dianalisis menggunakan Uji F 5% kemudian dilanjutkan dengan Duncan's Multiple Range Test (DMRT). Variabel yang diamati adalah masa kesegaran bunga, saat bunga layu, presentasi bunga layu, presentasi bunga mekar, diameter bunga dan warna bunga.

Hasil penelitian menunjukkan bahwa kombinasi larutan konsentrasi 10% ekstrak daun sirih dengan 10% nira tebu dapat memperpanjang masa kesegaran bunga potong gerbera hingga 13,67 hari. Lama waktu perendaman 6 jam mampu mempertahankan masa kesegaran bunga potong gerbera hingga 11,69 hari. Kombinasi larutan ekstrak daun sirih 10% ditambah 10% nira tebu dengan waktu lama perendaman 9 jam dapat memperlambat bunga potong gerbera hingga 12,33 hari.

Kata kunci : bunga gerbera, larutan pengawet, daun sirih, nira tebu, masa kesegaran

## SUMMARY

*Post-harvest handling is important to maintain the time of freshness, flavor and quality of flowers. Pulsing is a preservative treatment of fresh flowers after harvest to provide a source of nutrients in flowers and protect the flower stalk from the attack of microorganisms causing blockage of vessels in the flower stalk. This research aimed to determine the combination of betel leaf extract with the most appropriate sugar cane juice to the freshness of gerbera cut flowers, to study the influence of the best longest immersion time to maintain the freshness of gerbera cut flowers, and the combination of the extract of betel leaf with sugar cane juice and immersion time to slow the lumber of gerbera cut flowers.*

*The research was conducted in the Agronomy and Horticulture Laboratory, Faculty of Agriculture, Jenderal Soedirman University, started from May until July 2017. Factorial Random Block Design was used with 2 factors and 3 replicates. The first factor is a combination of leaf juice extract and sugar cane juice which consists of 4 combinations of control, 5% betel leaf extract and 10% sugar cane juice, 10% betel leaf extract and 10% sugar cane juice, 15% betel leaf extract and 10% cane. The second factor is the long immersion time consisting of 3 test levels in 3 hours, 6 hours and 9 hours. The data obtained were analyzed using F 5% Test then continued with Duncan's Multiple Range Test (DMRT). The variables observed were the period of freshness of flowers, the flower wilted, the presentation of wilting flowers, the presentation of flowers bloom, the diameter of flowers and the color of flowers.*

*Result of the research indicated that the combination of 10% concentration of betel leaf extract with 10% cane juice can extend the freshness of gerbera cut flowers up to 13.67 days. The long immersion time in 6 hours can maintain the freshness of gerbera cut flowers up to 11.69 days. The combination of betel leaf extract solution 10% and 10% sugar cane juice with a long immersion time in 9 hours can slow gerbera cut flowers up to 12.33 days.*

*Keywords : gerbera, preservative supplement, betel leaf, sugar cane juice, freshness of vase live*