

INTISARI

Kepel (*Stelechocarpus burahol* (Bl.) Hook F. & Th.) merupakan salah satu tanaman tanaman buah asli Indonesia yang termasuk tanaman langka. Perbanyakan tanaman kepel secara konvensional membutuhkan waktu lama, sehingga dilakukan upaya perbanyakan melalui kultur *in vitro*. Hingga saat ini metode sterilisasi kepel belum pernah dilakukan. Penelitian ini bertujuan untuk mendapatkan metode sterilisasi embrio dan endosperm yang tepat menggunakan Sodium hipoklorit (NaOCl). Penelitian ini dilaksanakan di Laboratorium Kultur *In vitro* Fakultas Pertanian, Universitas Muhammadiyah Yogyakarta pada tahun 2018. Penelitian ini disusun menggunakan Rancangan Acak Lengkap (RAL) faktor tunggal 8 perlakuan yaitu perendaman eksplan menggunakan NaOCl pada eksplan embrio dan endosperm kepel dengan masing-masing perlakuan (EN5%-5', EN5%-10', EN10%-5', EN10%-10', EM5%-5', EM5%-10', EM10%-5' dan EM10%-10').

Hasil penelitian menunjukkan bahwa perlakuan embrio dengan konsentrasi NaOCl 10% selama 5 menit (EM10%-5') merupakan metode sterilisasi terbaik yang didukung parameter persentase eksplan hidup tertinggi 88,89%, persentase kontaminasi 0% dan persentase *browning* 11,11%, serta persentase berkalus 22,22% dengan diameter kalus paling besar 3,24 mm dengan warna kalus putih dan bertekstur kompak.

Kata kunci : *Burahol, Kultur jaringan, Clorox, Embrio, Keping Lembaga*

ABSTRACT

Kepel (Stelechocarpus burahol (Bl.) Hook F. & Th.) is one of Indonesia's native fruit plants, including rare plants. Conventional propagation of kepel plants takes a long time, propagation is done through tissue culture. Until now the kepel sterilization method has never been done. This study aims to obtain the right method of embryo and endosperm sterilization using Sodium hypochlorite (NaOCl). This research was conducted at the In vitro Culture Laboratory of the Faculty of Agriculture, Muhammadiyah University of Yogyakarta in 2018. This study was compiled using a single completely randomized design (CRD) of 8 treatments, namely immersion of explants embryonic and endosperm kepel using NaOCl in with each burn (EN5% -5', EN5% -10', EN10% -5 ', EN10% -10 ', EM5% -5', EM5% -10 ', EM10% -5' and EM10% -10 ').

The results showed that embryo treatment with concentration of 10% NaOCl for 5 minutes (EM10% -5 ') was the best sterilization method that strengthened the percentage parameters of live explants 88,89%, percentage of contamination 0% and percentage of browning 11.11%, and percentage of calli 22.22% with the largest calli diameter of 3.24 mm and color calli of white and has compact texture.

Key words : Burahol, Tissue culture, Clorox, Embrio and Endosperm.