INTISARI

Terung merupakan tanaman yang banyak digunakan sebagai tanaman model dalam perbaikan sifat karena peran dan potensi morfogenik terung yang tinggi. Terung mempunyai peran penting dalam menunjang kebutuhan nutrisi dan kesehatan. Karena peran ini, telah banyak penelitian dilakukan untuk mendapatkan terung unggul. Budidaya jaringan terung telah banyak dilakukan namun tingkat regenerasinya masih rendah. Tujuan dari penelitian ini adalah mengetahui kemampuan regenerasi tiga sumber eksplan lima kultivar terung. Penelitian menggunakan pendekatan percobaan dengan perlakuan tersusun oleh faktor sumber eksplan dan kultivar yang disusun dalam Rancangan Acak Lengkap (RAL). Faktor kultivar terdiri dari Lokal Bantul, Tanteloh, Sulawesi Telur, Gelatik, dan Sulawesi Tomat, sedangkan faktor organ sebagai sumber eksplan adalah akar, daun, dan kotiledon. Pengamatan dilakukan secara kualitatif dan kuantitatif. Data kualitatif dianalisis secara deskriptif dari gambar yang dikumpulkan selama percobaan, sedangkan data kuantitatif dianalisis menggunakan analisis varian (ANOVA) dan apabila terdapat perbedaan yang nyata dari suatu sumber ragam, maka analisis dilanjutkan dengan *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan organ sebagai sumber eksplan pada masing-masing kultivar memiliki kenampakan yang beragam tergantung kultivar. Regenerasi paling baik berdasarkan pengamatan kualitatif dan kuantitatif terjadi pada eksplan kotiledon Lokal Bantul.

Kata kunci: Sumber Eksplan, Regenerasi *in vitro*, Terung

ABSTRACT

Eggplant has been widely used as a model plant in the improvement of plant characteristics due to its high potential morphogenic capacity. Eggplant also has an important role to support nutrition needs and healths. Because of this role many research has been done to develop superior eggplant. Eggplant tissue culture has been successfully carried out but regeneration level was still very low. The purpose of this research was to determine the response of three different explants sources i.e. roots, leaves and cotyledones of five eggplant cultivars to be in vitro regenerated. The treatments which consist of 2 factors i.e. cultivars and explants were arranged in completely randomized design (CRD). Cultivar factor is consisted of Local Bantul, Tanteloh, Sulawesi Telur, Gelatik, and Sulawesi Tomat, whereas explant source is consisted of root, leaf and cotyledone which is cultured in MS media containing 3 mg/L BAP. Qualitative and quantitative responses were observed. Qualitative data were used to clarify the differentiation of explant to plantlet, whereas quantitative data were analyzed using analysis of variance (ANOVA). If there is a significant effect of variation sources, wheather main or interaction effect was compared followed by Duncan's Multiple Range Test (DMRT). The results showed that explant source of each cultivar has different qualitative response to media. Cotyledon of local Bantul yielded the highest number of plantlet. Therefore the best explant for in vitro eggplant culture based on qualitative and quantitative obervation is the cotyledon of Local Bantul.

Keywords: Explant Sources, in vitro regeneration, Eggplant