

Pengaruh asam askorbat, karbon aktif, dan durasi pencahayaan terhadap pencokelatan eksplan dan regenerasi tunas kultur in vitro pisang Barangan (*Musa acuminata* L.)

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Abstrak

The research was conducted to determine the effect of ascorbic acid (50 mg l^{-1} , 100 mg l^{-1} , 200 mg l^{-1}) and activated charcoal (0.5 g l^{-1} , 1 g l^{-1} , 2 g l^{-1}) independently with different light duration (4 weeks in darkness, 2 weeks in darkness followed by 2 weeks in 16 hours light and 4 weeks in 16 hours light) on shoot regeneration. Explants of banana cultivar Barangan (*Musa acuminata* L.) were planted on MS basal media supplemented with 1.6 mg l^{-1} IAA, 4.0 mg l^{-1} BAP and cultured for 4 weeks. After 4 weeks, explant browning level was evaluated. Explants were then cut vertically into two pieces and planted on the same media to induce shoot regeneration. After 4 weeks in shoot regeneration media, number of shoot, colour of shoot and height of shoot were evaluated. MS media supplemented with 1.6 mg l^{-1} IAA and 4.0 mg l^{-1} BAP without ascorbic acid and activated charcoal in darkness for 4 weeks was the most suitable media for shoot regeneration. The shoot regeneration gave average of 10,4 shoots per explant.

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