PENYEDIAAN BIBIT PISANG TANDUK (*Musa paradisiaca* L. AAB Grup) SECARA KULTUR JARINGAN

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ABSTRACT

The micropropagation of plantain cv. Pisang tanduk to supply seedlings was done. There were 3 in vitro experiments: (i) The effects of Adenin sulfat (0; 100; 150; 200 ppm) - IAA (0; 3; 6; 9 ppm) on the plantlet production, (ii) The effects of BAP (0; 3; 6; 9 ppm) - IAA (0; 2; 4; 6; 8 ppm) on the shoot multiplication and (iii) The effect of IBA (2; 4; 6; 8 ppm) on the root formation of microshoot. The extra vitrum experiment was done by potted plantlets on the compost medium and then transferred to soil medium.

The combination of Adenin sulfat - IAA (experiment i) induced the production of plantlets, but the maximum amount was only 4 plantlets per culture. In experiment (ii), plantlets were produced in media without plant growth regulator and media containing IAA only (5 plantlets per culture). The addition of BAP induced multiple shoot (19 shoots/culture) in 2 months, but there was no root formation. The addition of IBA induced root formation. Plantlets were successfully to be acclimatitated and grew well become seedlings.

RINGKASAN

Penelitian untuk mencari metode yang tepat untuk menghasilkan bibit pisang tanduk dengan memanfaatkan teknik kultur jaringan telah dilaksanakan.

Percobaan in vitro terdiri atas 3 percobaan yaitu (i) pe-ngaruh Adenin sulfat (0; 100; 150 dan 200 ppm) - IAA (0; 3; 6 dan 9 ppm) terhadap produksi plantlet, (ii) pengaruh BAP (0; 3; 6 dan 9 ppm) - IAA (0; 2; 4; 6 dan 8 ppm) terhadap penggandaan tunas mikro dan (iii) pengaruh IBA (2; 4; 6 dan 8 ppm) dan asal eksplan dari percobaan (ii) terhadap pengakaran tunas mikro pisang tanduk. Percobaan extra vitrum dilakukan dengan menanam plantlet yang dihasilkan percobaan (i), (ii) dan (iii) pada media kompos di *screen house* yang dilanjutkan dengan media tanah dalam poly bag di ruang terbuka.

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