CELL SUSPENSION CULTURES FROM CALLUS IN BANANA (*MUSA SPP.*)

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Cell suspension cultures were obtained from callus cultures of banana (*Musa spp.*). The callus (in vitro) were developed from three different explants: (i) pulp of fruit, (ii) anther and (iii) uppermost part of proliferating buds. The explants on basic Murashige and Skoog medium (1962), supplemented with 2,4-D, produced callus within 2 weeks. Callus of all three explants gave a suspension within 3 days after inoculation.

Histologically, cells from the callus of proliferating buds showed different characters to that of fruit pulp and anther. Cells from the callus of buds had characters of actively dividing cells and many cells were at the dividing stage. However cells of the callus from fruit pulp and anther, looked empty with large vacuoles. Very few cells were at the stage of division.

Histological studies revealed that cell suspensions of proliferating buds (in vitro) have a greater potential for division and regeneration into complete plants. Therefore, such cell suspensions are valuable in protoplast and hybridization studies, thus in the improvement of the crop.