

**Studing and searching pr ocess of growth explantsbanana(*Musa acuminata* L.) under conditions regulatory growth with in vitro culture.**

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Banana has high level of sterility , varitey of polypolidy , no produce seed, preservation difficulty and traditional of culture , such as banana is big body and have contamination of virus and fungi, there for scientists have liked in vitro culture.

Musa decontaminated by antiseptics, so they cultured on the MS - modified media. Process of growth have studied with changes of fraction auxin and cytokinin.

Means of fresh weight , lenght of shoot, number of lateral shoot and density of rooting have measured, thus they have searched with specific pattern of statistic both levels of auxin and cytokinin are 0.5 , 1, 1.5 , 2 , 3 mg/L.

**Results:**

1- Explants has grown on the media from two weeks.

2- Induction phase is in the mid-Period culture.

3- Growth of explants has been decreased with increasing auxin

4- Mean of growth has increased with high level auxin and stable level cytoknin.

5- Process of growth has been inhibited with increasing auxin, thus plantlets of tissues differentiated.

6- Lenght , number of root have increased , such as density of rooting is very good with high level auxin.