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## Effect of BA and NAA on adventitious bud induction from in vitro germinant *Eucalyptus pellita*

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### Objectives

To determine the effect of BA and NAA on adventitious bud induction from *E. pellita*

### Materials and Methods

#### 1. Material

-Explants : cotyledon, hypocotyl and root segments of in vitro germinant

-Medium and PGRs : DKW (Driver and Kuniyuki, 1984), BA ( 6-Benzylamino purine),  
NAA ( $\alpha$ -naphthalene acetic acid)

#### 2. Methods:

Various segments from 7 and 14 day old in vitro germinant were cultured on DKW medium supplemented with BA and NAA combination. After 4 weeks of culture in darkness, the cultures were subcultured onto the same fresh medium and maintained in light culture room. The capacity of adventitious bud induction from the explants was measured after 6 weeks.

### Results and Discussion

The capacity of adventitious bud formation greatly depends on both juvenility and the origin of the explants ; the more juvenile material is the better in their ability to form adventitious buds even in in vitro germinants. Leaf segment proved to have higher morphogenetic potential on adventitious bud formation than did hypocotyls or root segment. The capacity to show morphological response was in decreasing order : cotyledon > hypocotyl > root. No adventitious buds were formed when root segments were used as culture material. And optimum medium appeared to be MS + 0.5mg/L BA and 0.2mg/L NAA. Adventive buds could be developed into multiple shoots and grown normally on DKW medium plus 0.2mg/L BA.