# SHOOT INDUCTION OF VANILI (*VANILLA PLANIFOLIA* ANDREWS) WITH COMBINATION CONSENTRATION OF BAP AND NAA IN VITRO

**Lidya Puspa Sanggarawati**
**Study Program of Cultivation of Crops Plantation**
**Majoring of Agricultural Production**

ABSTRACT

The study aims to know the effect of combination concentration NAA and BAP induction vanilla shoot in vitro. The study was executed in culture tissue laboratory at state polytechnic of jember. Research executed by using RAL (completely randomized design) with sort combination concentration regulatory substance grow in the media as a treatment. Regulatory substance grow NAA 3 levels N1 = N1 = 0.5 ppm / l; N2 = 1 ppm / l; N3 = 1.5 ppm / l and BAP with 3 levels: B1 = 1.5 ppm / l; B2 = 2 ppm / l; B3 = 2.5 ppm / l. Observational data analyzed by analysis of variance and the observed data were analyzed using analysis of variance and continued with the DMRT (Duncan Multiple Range Test) 5%. Observation of shoot induction was carried out from H+ 1 day after inoculation and other parameters such as shoot height, root length, leaf number, shoot growth percentage, the number of roots, the number of internodes, number of shoots were carried out at H+ 90 days after inoculation. The results showed that the combined concentrations of NAA and BAP didn't affect the induction of vanilla shoots.

**Keyword :** NAA, BAP, Shoot of vanilla

# INDUKSI TUNAS VANILI (*Vanilla planifolia* Andrews*)* MENGGUNAKAN KOMBINASI KONSENTRASI BAP DAN NAA SECARA IN VITRO

**Lidya Puspa Sanggarawati**
**Program Studi Budidaya Tanaman Perkebunan**
**Jurusan Produksi Pertanian**

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi konsentrasi NAA dan BAP terhadap induksi tunas vanili secara in vitro. Penelitian ini dilaksanakan di Laboratorium Kultur Jaringan Politeknik Negeri Jember. Penelitian ini dilaksanakan dengan menggunakan metode RAL (Rancangan Acak Lengkap) dengan macam kombinasi konsentrasi zat pengatur tumbuh pada media sebagai perlakuan. Zat pengatur tumbuh NAA 3 taraf : N1 = 0.5 ppm/l ;N2 = 1 ppm/l ;N3 = 1.5 ppm/l dan BAP dengan 3 taraf :B1 = 1.5 ppm/l ; B2 = 2 ppm/l ; B3 = 2.5 ppm/l. Data hasil pengamatan dianalisis menggunakan analisa sidik ragam dan dilanjutkan dengan uji lanjut DMRT (Duncan Multiple Range Test) 5%. Pengamatan induksi tunas dilakukan mulai H+ 1 hari setelah inokulasi dan pengataman parameter yang lain seperti tinggi tunas, panjang akar, jumlah daun, persentase tumbuh tunas, jumlah akar, jumlah ruas dan jumlah tunas dilakukan pada H+ 90 hari setelah inokulasi. Hasil penelitian menunjukkan bahwa kombinasi konsentrasi NAA dan BAP tidak berpengaruh dalam induksi tunas vanili.

**Kata Kunci :** NAA, BAP, Tunas vanili