Medium Development for Ansamitocin P-3 production with *Actinosynnema pretiosum* ATCC 31565 using Statistical Approach

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Statistical techniques were adopted for medium development of ansamitocin P-3 production using *Actinosynnema petisoum* ATCC 31565. Plackett-Burman design was used to screen out the nutritional factors which effects on antibiotic production. Out of 11 factors studied by Plackett-Burman design, six influenced the antibiotic production. Further, Central composite Design (CCD) and Response surface methodology (RSM) were used to optimize the significant factors (sucrose, dextrin, yeast extract and poly peptone) and response surface plots were generated. Using these response surface plots, optimized values of the factors were determined for higher ansamitocin P-3 production.