



International Journal of Advanced Research in Biology, Engineering, Science and Technology  
(IJARBEST)

Vol. 2, Special Issue 8, February 2016 in association with  
KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY, VIRUDHUNAGAR  
DEPARTMENT OF BIOTECHNOLOGY

ORGANIZES

DBT, NEW DELHI SPONSORED NATIONAL LEVEL CONFERENCE ON CONTEMPORARY TRENDS IN  
BIOENERGY AND GREEN TECHNOLOGY: CHALLENGES AND OPPORTUNITIES [ORA-2016]  
(25-26<sup>TH</sup> FEBRUARY 2016)

# EXTRACTION OF ANTHOCYANIN FROM *CLITORIA ternatea* L. FLOWERS: OPTIMIZATION USING RSM

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## Abstract

The worldwide demand for natural dyes is nowadays of great interest due to the increased awareness on therapeutic properties of natural dyes in public. So there is a demand for colorants from natural sources that can serve as alternatives to the use of synthetic dyes due to the consumer concerns over the use of synthetic additives. The finding that anthocyanin pigments containing acyl substituent are incredibly stable opens new opportunities for producers. The stable acylated anthocyanins are present in large amounts in vegetables and flowers. In this study *Clitoria ternate* flowers were utilized to extract bluish anthocyanins using soxhlet extraction. The process parameters such as extraction time (3-8 h), Solvent ratio (20% - 80% ethanol in water) and temperature (40 - 80°C) have been varied to understand their influence on the maximum extraction efficiency and to identify the optimum values.

**Keywords:** *Clitoria ternate*, Anthocyanin, extraction, optimization.

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