

Survey the Betacyanin Extraction from the Flower of Purple *Bougainvillea* of Vietnam and the Stability of This Pigment

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Abstract: Purple *Bougainvillea* is grown in everywhere in Vietnam. Especially in the South of Vietnam, purple *Bougainvillea* is in flower in all year. *Betacyanin* which is extracted from flowers of this tree is an atural color. This pigment can be applied in the food processing industry. Our research is focusing on the optimality of the pigment extraction from purple *Bougainvillea* of Vietnam and survey the stability of this pigment in different condition. The experiments showed that when the solvent is water use for betacyan in extraction, it obtained more betacyanin than when using methanolor ethanol solvent. The best rate of the flower of purple *Bougainvillea* and the optimal solvent is1:5. The optimal condition of the anthocyan in extraction is: pH = 6, at the temperature of 30 °C, for 30 min. The results also showed the stability of the betacyanin of this flower. The color of the researched flower pigment gradually reduced from 20 to 95 °C. This betacyanin is stability in the pH range from 4 to 7. The addition of 0.15% vitamin C will increase the color fastness. So it is suitable for using in beverage industry.

Key words: Purple Bougainvillea, betacyanin, pigment extraction, pigment stability.