

RECENT ADVANCES ON STABILITY OF ANTHOCYANINS

Authors

Hocine Remini, H Remini, Farid Dahmoune, F Dahmoune, Yasmine Sahraoui, Y Sahraoui, Khodir Madani, K Madani, VN Kapranov, VN Kapranov, EF Kiselev, EF Kiselev

Publication date

2018/12/15

Journal

RUDN Journal of Agronomy and Animal Industries

Volume

13

Issue

4

Pages

257-286

Description

Since Neolithic era, natural pigments have been added to foods and colour of food products is still one of the major concerns of food industry. Anthocyanins are the most noticeable group among coloured flavonoids, widely existing in the roots, stems and leaves as well as flowers and fruits of the vascular plants. They have a high potential for use as natural colorants instead of synthetic pigments because of their attractive colour and pharmacological properties. Stable and attractive colours are a highly valued attribute in competitive food industry. Considerable studies have been done on the effects of the most important chemical and physical factors involved in the stability of anthocyanins (temperature, light, pH, SO₂, metal, sugar, ascorbic acid and oxygen), their concentrations, chemical structures, and matrix food compositions. Furthermore, the effects of separation technologies including microwave/ultrasound assisted extraction (MAE, UAE), and Colloidal Gaz Aphron (CGA) fractionation on the stability of anthocyanins are reviewed.