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TAL 797 – Seminário

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## POTENTIAL OF ANTHOCYANINS FROM SORGHUM AS A NATURAL FOOD COLORANT

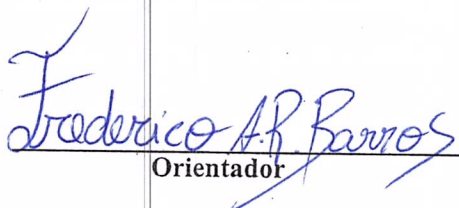
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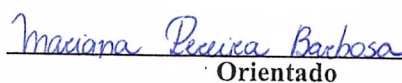
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Natural and synthetic food colorants are used in the food industry to enhance the color of food or to restore it when lost during processing. However, there is a concern about health risks related to the consumption of synthetic colorants, resulting in a major use of natural food colorants by the food industry. Anthocyanins are flavonoids and comprise the largest group of water-soluble pigments, ranging from red to blue in many fruits and vegetables. These pigments have been extensively studied because of their bioactive properties and application as natural food colorants. However, anthocyanins present some limitations, since they are susceptible to degradation by factors such as light, pH, heat, presence of some additives (e.g. sulfite and ascorbic acid), enzymes, among others. Therefore, several researches in this area have centered on searching for better sources and greater stability of this pigment. Sorghum (*Sorghum bicolor* (L.) Moench) is a single grain among the major cereals, possessing high levels of a diverse range of bioactive compounds, including anthocyanins. The sorghum anthocyanins, termed 3-deoxyanthocyanins, are different from the common ones since they do not have the hydroxyl group at the C-3 position. This characteristic improves its stability compared to anthocyanins from fruits and vegetables. Some studies have demonstrated the higher stability of sorghum 3-deoxyanthocyanins to variations in pH, heat treatment and presence of sulfite and ascorbic acid. Thus, the increasing demand for natural ingredients by consumers has forced the food industry to seek natural food colorants, presenting a renewed opportunity to explore the sorghum 3-deoxyanthocyanins.

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