

Iron in Highbush Blueberries and It's Effect in Total Antioxidant Status (TAS) Assay

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ABSTRACT

Blueberries are well known for their antioxidant property, due to the polyphenolics present in these fruits. The antioxidant activity of blueberries is usually measured by colorimetric assays involving metals such as iron, copper. Total Antioxidant Status (TAS) assay was previously studied on blueberry fractions which has metmyoglobin (protein bound iron) in its +3 oxidation state to assess the antioxidant activity of compounds. Studies showed that the amount of iron in highbush blueberries is too low to have a significant effect on the antioxidant activity measured by the TAS assay. A short comparative study was also performed using ascorbic acid in TAS assay and bathocuproine copper complex assay for a quick, inexpensive, rapid analysis of crude screening for antioxidant compounds.

KEYWORDS

Antioxidant . Blueberries . Iron

REFERENCES

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