

## **Adulteration of botanicals – the need for a scientifically valid method**

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### **Abstract**

The PHYTAS proficiency testing (PT) scheme, operated by LGC Standards, has been developed to assess the ability of participant laboratories to confirm the identity of botanical materials and quantify active components using their routine analytical methods.

Plants which contain high concentrations of polyphenolic compounds are valued for their antioxidant properties and so reliable identification of these materials is important.

This poster presents the results from several rounds of the PHYTAS PT scheme, where, anthocyanin containing, botanical materials have been presented for qualitative or quantitative analysis.

The results for the qualitative determination of bilberry and black chokeberry indicate that mis-identification may be commonplace and that some of the methods commonly used for identification of these botanicals may not be fit for purpose.

By contrast the qualitative determination of other common botanicals, such as St John's Wort and Ginkgo Biloba shows a good performance by the PT participants.