

## **Sweet plants – Application, analysis and characterization as primary phyproof<sup>®</sup> reference substances**

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Sweet and aromatic tasting plants like sweetleave (*Stevia rebaudiana*), the leaves of Chinese blackberry and Lou Han Guo, are used in meals and beverages since centuries. Their sweet taste is mainly derived from terpene glycosides like stevioside, rebaudioside A, rubusoside and related compounds. In addition to the taste properties there are indications of further positive nutritional properties. The ground leaves of Stevia are 30 times sweeter than saccharose, while the isolated pure compounds are up to 300 times sweeter. Due to their low caloric energy and high sweetening strength, as well as their stability during processing of food, compounds like stevioside and rebaudioside A are of great interest for the food industry.

We give an overview of the isolation of terpene glycosides from sweet plants, and their analytical characterization as primary reference substances for use in quality control.