

**Title** Glucosinolates in crucifer species affected by postharvest elicitors – altered gas compositions and UV-b irradiation

**Author** M. Schreiner, S. Huyskens-Keil, I. Mewis, C. Ulrichs and A. Krumbein

**Citation** ISHS Acta Horticulturae 867:53-60. 2010.

**Keyword** phytochemical; secondary plant metabolism; CA storage; MAP; ultraviolet

#### **Abstract**

Inverse associations between crucifer species intake and chronic diseases, such as different types of cancer have been demonstrated in numerous epidemiological studies. Phytochemicals, e.g. glucosinolates, have been indicated to be responsible for this observed protective effect. Application of postharvest elicitors can trigger distinct changes in the plant's secondary metabolism. Thus, targeted postharvest elicitor treatments may be used to obtain crucifer species enriched with glucosinolates for sale as fresh market products or used as raw material for functional foods and supplements, thereby promoting higher consumption of these health-promoting substances.