

Title Can anti-cancer potential of radish sprouts be increased by pre-harvest inorganic or organic sulphur supplementation?

Author T.J. O'Hare, L.S. Wong

Citation Program and Abstract. 2007 Australasian Postharvest Conference. Crowne Plaza Terrigal, NSW, Australia. 12 September 2007. 87 p.

Keywords radish; anti-cancer; Sulforaphene

Abstract

Radish sprouts are a potent source of the glucosinolate, glucoraphenin, a compound that when consumed is converted to sulforaphene. Sulforaphene is a powerful inducer of mammalian phase 2 enzymes, which are capable of accelerating the removal of carcinogens from the body. Consequently, consumption of radish sprouts has potential anti-cancer benefits. As glucoraphenin is synthesised from the sulphur-containing amino acid, methionine, it is possible that supplementation of actively growing sprouts with either inorganic sulphate or organic methionine may potentially boost glucoraphenin synthesis and subsequent anti-cancer potential. The current paper reports on preliminary experimental results.