

Detection of Antioxidants in Fresh Fig

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Objective: Determine levels of antioxidants present in fresh figs, in comparison to other commodities.

Materials and Methods

Antioxidants were measured in three mature fig cultivars, 'Sierra', 'Kadota' and 'Black Mission'. Fig samples (skin and flesh) were extracted in methanol and analyzed using a DPPH method adapted from Brand-Williams and Berset (1995). Data were compared with other fresh and commercially available commodities that had been previously analyzed using the same method.

Conclusions

- Fresh fig contains phenolic antioxidants, while dark-colored skinned fig appears to have more antioxidant activity than yellow-colored skinned figs.
- Antioxidants in fig should be investigated further for marketing and cultivar evaluation purposes.
- Different types of antioxidants may be more readily extracted using different solvents, such as ethyl acetate, hexane or chloroform.

Table 1. Antioxidant Activity (AOA) determined by extraction in methanol and analyzed by DPPH method, measured in 3 fresh fig cultivars.

Cultivar	AOA ($\mu\text{g TE/g tissue}$) ^Z
'Sierra'	416.7
'Kadota'	474.4
'Black Mission'	1619.1

^Z AOA measured in “micrograms of Trolox Equivalents (water-soluble vitamin E analogue) per gram fruit tissue.”