



AP-19: Enzymatic activities of the different pumpkin cultivars from Algeria

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Abstract

Pumpkin is a healthy, versatile vegetable that's loaded with a variety of nutrients, including fiber, vitamins, minerals, and antioxidants. Most of the health benefits of pumpkin are focused on its fiber content and micronutrients, including beta carotene and vitamin A.

The enzymatic inhibition activity of dry samples was performed on three raw cultivars that are popular in Algeria: V1 *Cucurbita maxima* (Gold nugget Pumpkin), V2 *Cucurbita moschata* (Butternut Squash), and V3 *Cucurbita moschata* (Musquée de Provençal Squash), by using various fruit parts (peel, pulp, fibers, and seeds).

The enzymatic inhibition activities were evaluated by three methods: Phenanthroline assay, α -amylase inhibition and antibrowning assay.

The results showed considerable differences in the enzymatic inhibition activities amongst the cultivars and the fruit parts. The internal part of the pumpkin fruit (seeds) is the one that revealed the lowest IC50 and the *Cucurbita moschata* (butternut squash) cultivar is the best in terms of the recorded activities.

Key Words: Pumpkin cultivars, enzymatic activity, phenanthroline assay, α -amylase inhibition, antibrowning assay, fruit parts.