



## Effect of Pretreatments on Shelf life and Nutritional Quality of Moth Bean (*Phaseolus aconitifolius* Jacq.) Sprouts

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**Abstract:** The present investigation was conducted with the objective to study the effects of various treatments and storage conditions on nutritional (ascorbic acid, antioxidant activity, total sugars, reducing sugars, phytic acid, polyphenol content) and keeping quality of moth bean sprouts. Moth bean (*Phaseolus aconitifolius* Jacq.) seeds after germination were subjected to various treatments viz., hot water dip (50°C for 2 min), ethanol vapours (30 min) and UV-Irradiation (10 kJm<sup>-2</sup> in laminar flow chamber for 1 h). Ascorbic acid and antioxidant activity were highest in ethanol vapours treated sprouts. There was decrease in polyphenols and phytic acid of sprouts by various treatments with maximum reduction in UV- irradiation treatment. Similar trend was observed at room and low temperature storage conditions. The sprouts were acceptable upto 24 h at room temperature and 96 h at low temperature storage conditions, except in hot water treatment, where the quality of moth bean sprouts was maintained upto 72 h at room temperature and 120 h at low temperature.

**Keywords:** Antioxidant activity, Ethanol vapours, Hot water dip, Moth bean sprouts, UV-irradiation

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