



## VITAMIN C OF SOME UNUSUAL LEAFY VEGETABLES

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**Abstract**

Unusual vegetables like *Boerhaavia diffusa*, *Chenopodium album*, *Portulaca oleracea*, *Tamarindus indica*, *Oxalis corniculata*, *osalis latifolia*, *Bauhinia purpurea* and *Altemanthera triandra* are the sources of nutrients for the body of human beings. Leafy vegetables are rich in dietary fibers, iron, calcium and vitamin C. Vitamin C of some of the unusual leafy vegetables was found to be considerably high. They can be included in the diet.

**Introduction-**

The term vegetable includes all foods of vegetable origin, but the definitions now exclude cereals and dried seeds of pulses. Regular use of leafy vegetables supplies many of the most essential health building and protecting substances, such as vitamins and minerals. Food is a source of essential nutrients require for health promotion and disease prevention. Increases in amount of natural dietary products are the basic necessity of human body for fighting against the diseases. These products produce antioxidants. (Barlow, 1990; Rice- Evans et. al. 1997). Among the various enzymatic and non-enzymatic parameters of antioxidants, vitamin C is one of the important, most powerful antioxidants (Smirnoff, 1996; Arrigoni and de Tullio, 2000; Horemans et. al. 2000b.). Vitamin C deficiency exacerbates the atherogenesis in animal's models. In order to protect the body from degeneration of diseases, vegetables play an important role (Ogunlesi M., & et. al. (2010). Vitamin C is naturally synthesized in the body of human being, it is not synthesized endogenously and therefore it has to be consumed through leafy vegetables. (LI Y and Schellhorn H.E. (2007) Food and Nutrition Board at the Institute of Medicine (IOM) of the National Academies (formerly National Academy of Sciences) recommended dietary intake for Ascorbic acid in the daily diet. (2000).

There are many crops cultivated as vegetables suitable for different seasons and climate. But it appears that the people are not having a full choice for their tastes and requirements or they are not getting these according to their need in the season, and therefore people got diverted for the use of other plant parts of the crops that are found growing as wild plants and some as weeds. ( Bhapkar and Bhore (1961). The weeds like *Boerhaavia diffusa*, *Chenopodium album*, *Portulaca oleracea*, *Tamarindus indica*, *Oxalis corniculata*, *osalis latifolia*, *Bauhinia purpurea* and *Altemanthera*

*triandra* were selected for the experiments, are consumed as unusual vegetables (Chauhan, (1989).

**Material and methods**

Eight types of leafy vegetables were selected for analysis. These were *Boerhaavia diffusa*, *Chenopodium album*, *Portulaca oleracea*, *Tamarindus indica*, *Oxalis corniculata*, *osalis latifolia*, *Bauhinia purpurea* and *Altemanthera triandra*. The plant material neatly washed in tap water.

The analysis of Vitamin C (Ascorbic acid) in all the leafy samples were carried out by Sadasivan and Theymoli Balasubramenan, 1987)

**Result and discussion****Result**

Sr. No.	Name of the plant	Vitamin C (Ascorbic Acid) mg/g
1	<i>Boerhaavia diffusa</i>	306.1234
2	<i>Chenopodium album</i>	306.1234
3	<i>Portulaca olercea</i>	204.0822
4	<i>Tarindus indica</i>	61.2246
5	<i>Oxalis corniculata</i>	122.4492
6	<i>Oxalis latifolia</i>	122.4492
7	<i>Bauhinia purpurea</i>	102.0410
8	<i>Altemanthera triandra</i>	40.8164

Among the unusual leafy vegetables, the highest level of vitamin C was recorded in the leaves of *Boerhaavia diffusa* and lowest in *Altemanthera triandra*. Vitamin C contents of all these plants under study were found to be considerably high so it is advisory to include them in day to day diet. The person who suffers from deficiency of vitamin C. should consume the *Boerhaavia diffusa* and *Chenopodium album* leaves as a vegetable in their diet.

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