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5

# ASPARAGUS

*J. Kabir, J.C.Jana, T.K.Maity and S. Chatterjee*



## 1.0 Introduction

Asparagus is a herbaceous perennial cultivated for its tender shoots, commonly known as spears, which has an agreeable flavour after it has been boiled. It is delicious, nutritious, and versatile vegetable. It can be used in a myriad of culinary and medicinal ways. Once the plant starts producing, it continues to give economic yield for 10-15 years. Globally, major asparagus growing countries are China, Peru, Mexico, Germany Spain, Italy, USA, Japan, Thailand and the Netherlands. In that year, China was the biggest producer of asparagus worldwide, producing approximately 7.8 million metric tons of asparagus. The U.S. production of asparagus amounted to about 35,460 metric tons in 2018(FAO, 2020). In India, its cultivation is very negligible and Himachal Pradesh is the largest growing state of asparagus.

A key production factor is the cultivation date. Greece, Spain and Italy being in a favourable position can harvest early varieties, which command the highest prices. The southern part of Italy would be the best site, where high yields could be obtained in February and March when market prices are high (Falavigna, 2000).

## 2.0 Composition and Uses

### 2.1.0 Composition

Asparagus is a good source of carbohydrates, proteins, calcium, iron, chromium, dietary fibre, folate, vitamins A, C, E, and K. Besides, asparagus is a great source of antioxidants. It contains high levels of the amino acid asparagine obtained from the juice of young shoots. Asparagus ranks among the top 20 foods in regards to its ANDI score (Aggregate Nutrient Density Index); this score measures vitamin, mineral, and phytonutrient content concerning the caloric content. The edible portion contains:

**Table 1: Composition of Asparagus (per 100 g of edible portion)\***

Water	91.7 g	Iron	1.0 g
Carbohydrate	5.0 g	β-carotene	540 µg
Protein	2.5 g	Ascorbic acid	33 mg
Fat	0.2 g	Niacin	1.5 mg
Ash	0.69 g	Riboflavin	0.2 mg
Potassium	278 mg	Thiamine	0.18 mg
Phosphorus	62 mg	Calories	26
Calcium	22 mg	Dietary fibre	0.7 g
Sodium	2 mg		

\* Pandita and Bhan (1992).

### 2.2.0 Uses

The plant is famous for its culinary and medicinal uses. The tender shoots or

# List of Contributors

## **Banerjee, S.**

Department of Vegetable Science, Faculty of Horticulture, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, 741252, Nadia, West Bengal, India

## **Chatterjee, R.**

Department of Vegetable and Spice Crops, Faculty of Horticulture, Uttar Banga Krishi Viswavidyalaya, Pundibari 736165, Cooch Behar, West Bengal, India

## **Chatterjee, S.**

Department of Horticulture, Centurion University of Technology and Management, Paralakhemundi 761211, Odisha, India

## **Dey, Shyam Sundar**

Division of Vegetable Science, ICAR-Indian Agricultural Research Institute, Pusa 110012, New Delhi, India

## **Hazra, P.**

Department of Vegetable Science, Faculty of Horticulture, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, 741252, Nadia, West Bengal, India

## **Islam, Sk Masudul**

Department of Vegetable Science, Faculty of Horticulture, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, 741252, Nadia, West Bengal, India