

Composition for 100 grams of Green Asparagus

Carbohydrates	3.6 grams
Protein	2.5 grams
Fat	0.3 grams
Fibre	0.9 grams
Calcium	16 mg
Phosphorus	59 mg
Iron	1.4 mg
Potassium	221 IU
Vitamin A	634 IU
Riboflavin	0.15 mg
Vitamin B	0.18 mg
Niacin	1.8 mg
Vitamin C	20 mg

Source: Food Composition Table for use in East Asia, FAO of the United Nations Food Policy and Nutrition Division, 1989.

Asparagus Production



**In St. Vincent
&
the Grenadines**

Produced by:
The Communications Unit
Ministry of Agriculture, Forestry & Fisheries
June 1997.
Redone October 2007.

HARVESTING

New spears are ready for harvesting within 3-7 days of cutting back the excess stems to soil level. Spears are cut when they are 8-10 inches in height.

Use a sharp sickle or knife to cut the spears at soil level. Do not break them by hand.

Store in a cool place or cover with a wet cloth until taken to market. A harvesting season may last for 2-10 weeks depending on the location being a cool or hot one.

MARKETING

The spears are bundled at convenient sizes with strips of plastic or suitable material for the local market. It is best to tie the spears at the top and bottom in such a way to keep them tight and firm until broken for use.

PESTS AND DISEASES

This crop is comparatively free from various pests and diseases. However, common problems can be found with the following diseases.

Stem Blight	Spray with a 50% Benlate W.P
Fusarium Wilt	Rotate every 3-5 years Use resistant varieties such as Mary Washington.
Crown Rot	As for Fusarium

Ensure enough moisture (irrigation) is available especially during the dry months.

FERTILIZER (From Transplanting to first Harvesting)

Nitrogen is the most important single element needed by Asparagus. Therefore a liberal amount of Ammonium Sulphate at planting and after each cutting season is recommended. This ensures a rank, vigorous growth of tops and an increase in the number and size of shoots.

Give Ammonium Sulphate at 758 lbs/acre (7 1/2 sacks/acre)

1st dressing	one month after transplanting
2nd dressing	one month after the 1st dressing (mould up at this time)
3rd dressing	one month after 2nd dressing

After the 3rd dressing give NPK (16-8-24) at 429 lbs/acre (4 1/2 sacks/acre).

TIPS ON CULTURAL PRACTICES

- Intercropping of Asparagus with other crops is not recommended
- Usually there may be 10-15 stems in one bud cluster. In the...
 - 1st & 2nd year allow 2-3 main stem/cluster
 - 3rd & 4th year allow 4-5 main stem/cluster

Time. This increases the quality of Spears. *Remember, avoid water logging as this weakens the plants.*

- Trellising of Asparagus may be necessary to prevent damage by strong winds and heavy rains. Here are some examples of trellises.

ASPARAGUS PRODUCTION

Asparagus is a member of the lily family used worldwide as a vegetable. It is a cool season crop that grows throughout the year lasting as long as 20-30 years in place.

The part of the crop eaten is called the Spears. These are the outgrowths of a network of fleshy roots used for storing food for the plant. When the spears emerge, if they are not harvested in time, they grow into a green fern-like bush to heights of 4-6 ft. These ferns produce food that is stored in the roots to produce the spears for the next year's crop.

RECOMMENDED VARIETIES

- Mary Washington
- V.C. 309
- V.C. 711

SITE SELECTION

Choose an area.....

- On the Northern or Eastern side of the land. This prevents the ferns from shading out sunlight from the other crops.
- Where the pH is not below 6.0
- Where the water table is not too close to the surface.

SOIL REQUIREMENT

Asparagus can be grown in a wide range of soil and climatic conditions. However, it prefers a deep sandy-loam soil type with a generous supply of humus. Stony and heavy clay soils are to be avoided as they result in too many crooked and thin stalks for the market. A soil pH of 6.0-7.0 is essential.

PLANTING PERIOD

To achieve 2 separate harvests per year, Asparagus should be planted

December-February **June-August**

During the humid months of September-November, the crop should be left to grow; no harvesting should be done.

NURSERY

Soak seeds 24-48 hours in a container of water before sowing. Sow seeds around December-February when there is not much rain. Prepared cambered beds with soil to which a large amount of pen manure has been added. The lands should not have been previously planted with Asparagus.

To a bed 3ft x 30ft, add 100 lbs of pen manure and 1 lb of 5% Furadan granules. The seed beds should be about 12 inches deep and the drains around the beds dug and kept clean.

Prepare rows 6 inches apart on beds. Place holes 4 inches apart. Plant 1 seed per hole at a depth of 1/2-1 inch and cover lightly with soil, then water the bed.

Seedlings would be ready for transplanting within 3 1/2-4 months. During this time, weed manually and water plants as deemed necessary. Spray young plant with Benlate 50% WP against fungal diseases.

Before transplanting the seedlings, give about 5 fertilizer dressings as outlined below:

FERTILIZER	TIME OF APPLICATION (Dressings)				
	1st	2nd	3rd	4th	5th
Pen Manure	100 lbs	-	-	-	-
Ammonium Sulphate	3 lbs	2 lbs	2 lbs	2 lbs	2 lbs
N.P.K.- 16: 8: 24	2 1/2	-	2 lbs	2 lbs	-

1st apply 20 days after germination

2nd apply 20-30 days after 1st dressing

3rd apply 20 days after 2nd dressing

4th apply 20 days after 3rd dressing

LAND PREPARATION

On sloping lands, small terraces can be used to established this crop. However, it is best to use the ridge and furrow systems, establishing the transplants in the furrow. Furrows should be at least 8 inches deep. Ensure a generous amount of well rotted penmanure or humus is added to the soil.

If beds or terraces are used:

- Clear the land of all weeds and plough mechanically or manually.
- Prepare beds/terrace with proper drains to prevent water logging.
- Place beds 4-5 ft apart. Construct terrace as appropriate
- Prepare holes 1 ft apart on beds/ terraces, deep enough to take the root without bending them.

SELECTION OF SEEDLINGS AND TRANSPLANTING

Seedlings would be ready for transplanting after 3-4 months in the nursery. The healthiest are usually the tallest and have the most shoots.

Transplant early in the mornings or late evenings.

Before digging out the seedlings as soon as they are dug of the seed-bed. This reduces the level of shock on the plant.

Place the seedlings in the hole/furrow, deep enough so that the crowns should be at least 6-8 inches below the level of the soil surface. Spread out the fine branching roots over the bottom of the hole/furrow before covering them. Firm the soil around them. In the case of the furrow, it is best to cover up to 3-4 inches at first then fill it slowly as the stalks begin to get and stronger.

New roots may take up to one month to appear so the transplants should be supplied with enough water and nutrients soon after transplanting.

MANAGEMENT

With good management, harvesting can commence after 6 months from transplanting in comparison with 2-3 years in the temperate countries. However, for this to happen it is important to keep away all weeds and