



BROCCOLI & CAULIFLOWER



MINISTRY OF AGRICULTURE & FISHERIES

CENTRAL FARM, CAYO -BELIZE

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ECONOMIC & NUTRITIONAL IMPORTANCE

Broccoli and cauliflower are vegetables rich in vitamins and minerals. Scientific findings indicate that broccoli is rich in Vitamin C and prevents certain types of cancer when consumed regularly. The Ministry of Agriculture and Fisheries has been promoting this crop to the point that it is now being commercially produced by vegetable farmers. The current yearly demand of these commodities is estimated at 250,000 lbs. The demand however is expected to increase sharply with the expansion of the tourism sector.

RECOMMENDED VARIETIES TO PLANT

The varieties of broccoli that are recommended for planting are Packman and Liberty. These varieties have good consumer acceptability, prolonged shelf life and are heat tolerant. The Packman variety is ready to harvest at 45 days after transplanting and Liberty at 55 days. The average weight per head is about 12 ounces for Packman and Liberty about 1 lb. The recommended varieties of cauliflower to plant are White Shot and Majestic. These varieties have the same characteristics as broccoli. The Majestic is ready to harvest at 55 days after transplanting and the White Shot at 48 days. The average head weight is 2 lbs and White Shot 1.5 lb.

PLANT SPACING

Broccoli and cauliflower plants are recommended to be planted at a spacing of 2 feet between plants and 2.5 feet between rows.

FERTILIZER APPLICATION

Broadcast 120 lbs of 0-46-0 fertilizer when preparing the beds for planting. At transplanting mix 1.5 bags of 46-0-0 and 2 bags of 0-0-60 and apply 1 Bayer cup per plant in a circular band at about 6 inches from the base of the plant. Mix the same amount and apply the same rate using the same method of application at 25 days after first application. Spray plants with polyfeed (foliar fertilizer) at the rate of 1 Bayer cup per gallon of water on a weekly basis until 4 weeks after transplanting. Thereafter apply Crop Finisher at the same rate and method as polyfeed for another 3 weeks.

WEED, PEST & DISEASE CONTROL

Control grassy weeds with Fusilade at the rate of 1 Bayer cup per gallon of water. Most weeds however are destroyed when the plants are mounded at 20 days after transplanting. No serious disease has been experienced in Belize however, for preventive measure you can apply Phyton or Ridomil to the crop. Apply New Bt if there are problems with the diamond-back moth. Apply as recommended on the label.

COST OF PRODUCTION PER ACRE

Description	Unit	Unit Cost (\$)	Amt	Total (\$)
<i>Land Preparation:</i>				
Ploughing	Hr	40.00	2	80.00
Harrowing	Hr	40.00	1	40.00
Bedding	Ac	40.00	1	40.00
<i>Planting medium:</i>				
Potting mix	bale	115.00	3	345.00
Seed Trays – 75 - Hole	tray	4.00	125	500.00
<i>Broccoli seeds</i>				
Packman	pk	52.00	2	
Liberty	pk	50.00	2	
<i>Cauliflower seeds</i>				
Majestic	Pk	85.00	2	
White Shot	Pk	85.00	2	
Fertilizers - Nutrileaf	kg	12.25	2	24.50
Crop Finisher	kg	14.00	2	28.00
46-0-0	bag	34.25	3	102.75
0-46-0	bag	34.40	3	103.20
0-0-60	bag	31.00	4	124.00
Insecticides – Neem X	liter	70.00	1	70.00
Malathion	liter	12.50	1	12.50
New Bt	tin	29.00	1	29.00
<i>Fungicide/Bactericide</i>				
Phyton 27	liter	104.00	1	104.00
<i>Herbicides - Fusilade</i>				
Paraquat	gal	40.00	1	40.00
Others – Indicate	liter	11.25	2	22.50
Spreader sticker	liter	8.00	1	8.00
Labor Costs: Filling trays with potting mix	day	2	25	50.00
Nursery management	hr	21	3	63.00
Weed control	applic.	3	25	75.00
Insect control	applic.	3	25	75.00
Disease control	applic.	3	25	75.00
Harvesting	applic	3	25	75.00
Transportation				50.00
Fuel & oil for irrigation				100.00
Total				2,303.45

Note: Cost of seeds not included

AVERAGE YIELD & RETURNS PER ACRE

Variety	Av. Yield (lbs)	Price/Lb	Returns
<i>Cauliflower</i>			
White Shot	6,500	\$1.50	\$9,750.00
Majestic	6,700	\$1.50	\$10,050.00
<i>Broccoli</i>			
Packman	5,400	\$1.50	\$8,100.00
Liberty	6,500	\$1.50	\$9,750.00

This fact sheet was produced by Manuel A. Trujillo - Agronomist and Oscar Salazar – DAC – Cayo District. May 14, 2004