

OKRA (Hibiscus esculentus) Seed Production.

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Leaf mosaic virus disease is a major limitation to Okra (Bandakka) production in Sri Lanka. The virus tolerant Okra varieties MI.5 and MI.7 were released by the Department of Agriculture in 1973. They are a cross between H.10 and 'Pusa sawani' from India. Varietal purity of MI.5 and MI.7 was maintained through out at the Agricultural Research Station, Maha Illuppallama, thereafter.

The incidence of virus disease is very sporadic and varies from location to location, depending upon the existence of virus, vector and weather. Seed sowing before onset of Maha or Yala rains is not advocated. Time of planting could minimize the disease, as well as by frequent spraying of an insecticide to control "white-fly" the vector of this virus.

Due to availability of a wide range of local okra strains, true seeds of MI.5 and MI.7 can be obtained by using the procedure given below, (Okra is cross pollinated to a certain extent. Therefore other strains of okra around a seed crop of the recommended variety should be removed, before flowering).

1. When one preferred variety is grown it should be isolated from another variety.

Eg.	<u>Type of Seed to Produce</u>	<u>Distance of isolation</u>
	Foundation Seed	- 400 metres.
	Certified Seed	- 200 metres.

1. Seeds must be collected from the centre plants only, leaving at least five guard rows right round. Selfing is not required.

2. To produce true to type seeds selfing is a must.
It can be done in 3 ways:-

- a). Cover the flowers before opening with a polythene bag 4" x 5".
- b). Cover the flowers before opening with a Brown paper bag 4" x 5".
- c). Tie the flower petals with a string allowing it to fall by itself after fertilization.

The most convenient method can be selected by one's experience.

Procedure:

- Variety MI.5 is recommended for the Maha season.
- Variety MI.7 is recommended for the Yala season.
- Flowering takes 30 - 35 days. All flowers arising before 30 days should be removed.
- Remove all off type plants.
- Any pods arising at this time too should be removed.
- All pods from untied flowers should be removed.
- All flowers should be bagged daily or tied in the morning hours before they open. The bag can be removed the following day once the flower is dropped. Fertilization is indicated by a small cone shaped button at the flower stalk which develops into a fruit.
- Allow such fruits to develop well and dry on the plant itself. They should be removed however before the pod dehisce (crack open) or before a heavy shower, as the seeds tend to germinate in the pod itself.

Dry the pods in the sun for 2-3 days and extract the seeds manually or by hulling.

Dry the seeds for another 2-3 days and store in cloth bags, treated with a fungicide recommended for seed treatment.

Under cold room storage conditions such seeds are viable for 1½ - 2 years.

