

**GUIDELINES FOR PRE-HARVEST, HARVEST, POST HARVEST STAGES
AND TRANSPORTATION OF RAW CASHEWNUTS
(To avoid Halogen taints)**

Halogen Taints in Cashew Kernels

A taint is a taste or odour totally alien to the cashew kernels and normally arising from external sources, in contrast to an off-flavour / off-odour which is a typical taste usually associated with internal biochemical changes to components in cashew kernels. Chlorophenol, Chloroanisole and related taints are a serious problem and can cause irreparable damage to the industry. Studies reveal that the reason behind this problem is the presence of organohalogen taints.

How to prevent it?

A) Pre-Harvest- Growing stage

- 1) Biocides (Herbicides, Pesticides and Fungicides) used should be completely free from compounds of the halogen family (chlorine, bromine and iodine).
- 2) Source of irrigation water should be pure and not be treated with halogen containing purifying agents (such a bleaching powder etc.) or other chemicals
- 3) Fertilizers and synthetic chemicals containing halogen compounds should be avoided.
- 4) The above points should be taken care of during the growing stage of cashew whether as monocrop or intercrop. When used as an intercrop, similar care should be taken for the accompanying crops.

B) Harvest

- 1) Only fully ripened fruits should be harvested.
- 2) Collection of raw nuts should be done only in new jute/sisal bags, which have not been treated chemically. Plastic bags should be avoided.
- 3) Harvested nuts should be kept away from chemicals / fertilizers or storage sheds which have chemicals/fertilizers

- 4) Harvested nuts should not be soaked in water to increase their weight or for any other reason. Water should not even be sprinkled on rawnuts.
- 5) Raw cashewnuts should be sun-dried immediately after harvest. Moisture levels in dried nuts should not exceed 8%. For long transit and storage periods moisture levels should be more appropriately controlled.

C) Post Harvest - Storage, Drying and Transportation

- 1) After drying to the specific moisture level, nuts should be stored only in new jute/sisal bags, which have not been chemically treated. Plastic bags should be avoided
- 2) Wooden pallets should not be used for storage (wooden pallets are normally treated with chlorophenol).
- 3) Godowns should be well maintained and well ventilated. Dampness and wetness should be avoided
- 4) Chemicals / pesticides / weedicides / fertilizers should not be stored along with rawnuts
- 5) Drying yards should not be cleaned with halogen containing cleaning agents (such a bleaching powder etc.).
- 6) Farmers should be advised properly on the standard storage practices for nuts and the dangers of using halogen based chemicals and fertilizers.
- 7) Vehicles used for transporting chemicals should not be used for the transportation of raw cashewnut. All vehicles should be cleaned without the use of chemicals and dried before transporting raw cashewnuts. Vehicles used for transporting raw cashewnuts should be dry.

(For distribution in India)