



UP TO
5X
LIFE
EXTENSION

MANGO GUARD



KIF ETHYLENE SACHET



KIF THERMO BAGS



It offers shelf life extension by controlling Anthracnose, Soft nose and sponge tissue caused by Colletotrichum Gloeosporioides during mango shipment and storage period.

EXTENDS LIFE UPTO 35 DAYS

The Ethylene Problem

5 kg Mango = 2 x 5gm sachet



What is Ethylene Gas ?

Fresh Vegetables, Fruits & Flowers start to ripen after harvesting and during the ripening process release ethylene gas and water vapour. This ethylene gas when in the package increases the ripening rate of the fresh produce hence aggravating the ripening process resulting in faster rotting of the fresh produce. The gas and water vapour produced work as a catalyst to the ripening process which in turn causes faster spoilage and microbial damage.

Effects Of Ethylene

- Accelerates Ripening.
- Loss of hardness and tenderness.
- Change in color from green to yellow.
- Change in Texture
- Causes Rotting by Pathological disorder Anthracnose
- Accelerates mould and fungal growth.
- Black spots on skin
- Skin abrasion and bruising.
- Starch to sugar conversion
- Overall loss of quality during storage and transport.


Keep It Fresh
EXTENDS LIFE UPTO 35 DAYS

KIF Technology



Prevention From Ethylene Damage

Mango quality is severely compromised if bananas produce moderate amounts of ethylene during transit. KIF sachets are the most effective way to inhibit harmful effects of ethylene gas. Sachets are filled with a special composition mixture of zeolite powder and potassium permanganate that causes ethylene & moisture absorption and simultaneous volatile bacterial inhibition (VBI). The use of sachets reduces the incidents of 'soft green', 'self-ripes" and rots/moulds, but after the ripening process, a more even ripening is noticeable as well"



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How To Use

Placing KIF Sachets in Mango corrugated boxes



- Simply place the sachets in the mango corrugated boxes or export packing. KIF sachet/pouch absorbs ethylene gas from the pack and create a bacteria free environment to extend the shelf life of packed mangoes. Doses would depend upon the pack size of mangoes.
- Temperature and ethylene emission has direct relationship, high temperature triggers high rate of ethylene production and this simultaneous increases the rate of respiration. Optimum temperature for Storage and shipping of mango is 13 °C (5658°F) and optimum relative humidity is 85-90%.

KIF technology is allowing the mango Exporters to reach newer distant markets, whilst offering their current market an even higher quality Mango".



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Thermobags

Mango boxes without thermobag



Mango boxes with thermobag



Our exporters and suppliers are facing major losses due the absence of cold chain. KIF thermo bag is the most effective and powerful solution to maintain the quality of mangoes during storage and transportation at ambient condition. In absence of cold chain, Thermo bags maintain the temperature gradient from outside to inside. It protects produce from temperature shock. KIF Thermo bags are based on advanced technology, its phases are micro perforated and the surface provides breathability to the packed mango boxes.



Features

- Economical
- Easy to use
- Power saving
- Reusable
- Saves client brand name
- Maintains mango quality
- No requirement of cold chain



EXTENDS LIFE UPTO 35 DAYS

Diseases

Pathological & Physiological Disorders

PATHOLOGICAL DISORDERS

Anthracnose

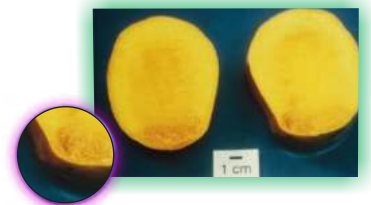


Caused by *Colletotrichum gloeosporioides*, begins as latent Disorders infections in unripe fruit and develops when the mangoes begin to ripen. Lesions may remain limited to the skin or may invade and darken the flesh.

Colletotrichum gloeosporioides affects mango crop as the most threatening malady that results in huge economic losses about 30–60 % damage which sometimes increased up to 100 % in fruit produce under wet or very humid conditions.

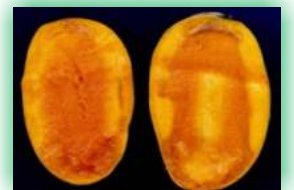
PHYSIOLOGICAL DISORDERS

Soft Nose



Softening of tissue at apex. Flesh appears over-ripe and may discolor and become spongy.

Spongy Tissue



Characterized by the development of non-edible, sour, yellowish and sponge like patch with or without air pocket in the mesocarp of the fruit during ripening.

KIF Sachet is one stop solution of all the problems. Sachets absorbs ethylene and inhibits the development of anthracnose and protects the quality of mangoes for longer period of time in storage and shipment.



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