

TECHNICAL SHEET

fruit fly control technique

Presentation of mango (CNUCED, 2016)

The mango is from the Anacardiaceae family. The scientific name of the tree is *Mangifera indica*. This tree, impressive by its size, can reach 25 m high, with a diameter of 10 m. The mango can be round, oval or kidney-shaped, and has a bark, inedible, which can be yellow, red or sometimes green depending on the variety. In the heart of the mango, there is a large, flat and slippery stone. When ripe, the flesh of the mango is a beautiful orange-yellow. It is generous, juicy, unctuous and sweet with a taste that depends on the variety but often reminds that of peach or apricot.

The mango is a fleshy fruit: its weight varies from 200 g to 2 kg for the biggest fruits.

Mango and the different parts

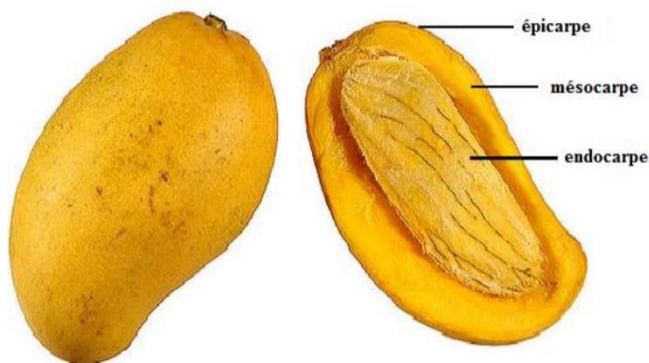


Figure 1 : longitudinal section of the mango (source : Kasse, 2015)

The fly

The most damaging fly species to mango are *Ceratitis cosyra* and *Bactrocera invadens*.



Figure 1 : species of flies harmful to mango (source : CTA, 2013)

Example of a fruit fly control technique (CTA, 2013)

"Parapheromone" traps are designed to capture the males of certain species. Traps are currently not only the best tools for detecting flies but, used on a large scale and in large numbers, they can also slow down the development of populations, especially at the beginning of the production season. This technique, called M.A.T. (Male Annihilation Technique), consists in placing at the beginning of the season a device, impregnated with a specific attractant and a contact insecticide (generally malathion or deltamethrin). The traps should be in place in the orchard two months before the fruit attractiveness period. It is also advisable to place these traps in orchards with other fruit species attractive to flies (citrus) and in areas known to be a refuge in the dry season. Generally, at least 10 devices per hectare are fixed to the branches of the trees. But the exact density depends on the type of device and is to be defined according to agro-climatic, agro-ecological and economic criteria.

Characteristics of the technology

Réduction des infestations de 80 à 100% dans les vergers

Bibliographic references

CNUCED (2016) : MANGUE ; Fonds de la CNUCED pour l'information sur les marchés des produits de base agricoles ; 23p.

CTA (2013) : Comment lutter contre les mouches des fruits infestant les mangues ; Comment lutter contre les mouches des fruits infestant les mangues ; 6p.

KASSE (2015) : Amélioration de la conservation des mangues 4^{ème} gamme par l'utilisation d'un enrobage, d'un traitement antimicrobien et du conditionnement sous atmosphère modifiée ; 98p.

Web sites consulted

[MANGUE - Un profil de produit de base par INFOCOMM \(unctad.org\)](#) ; 16/02/2022 at 09h23

[1748_PDF.pdf \(cta.int\)](#) ; 16/02/2022 at 09h35

[Mouche olive \(orgprints.org\)](#) ; 16/02/2022 at 09h47

<https://docplayer.fr/57961713-Universite-cheikh-anta-diop-de-dakar.html> ; 16/02/2022 at 09h59

Other references

Host Institution: INSTITUT DE L'ENVIRONNEMENT ET DE RECHERCHES AGRICOLES (INERA); Host Country: Burkina Faso; Coordinator: Vianey Tarpaga; CNS MEMBER INSTITUTIONS: - Institut de l'Environnement et de Recherches Agricoles (INERA) - Institut de Recherche en Sciences Appliquées et Technologies (IRSAT); Email: tarwendp@yahoo.fr; Telephone: +226 70708061 / +226 75129039