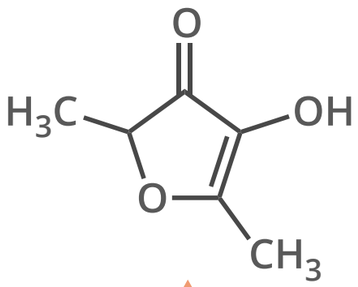
# THE CHEMISTRY OF MANGOES

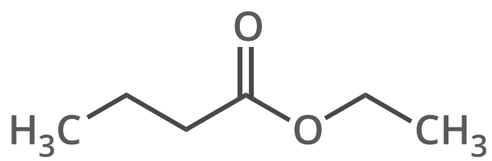
## MANGO FLAVOUR & AROMA COMPOUNDS

A large number of compounds contribute to the flavour and the aroma of mangoes. The cultivar, maturity, and geographical origin of the mango all influence the compounds present.

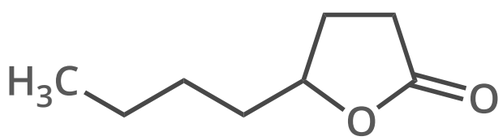
**270+** **VOLATILE COMPOUNDS DETECTED IN MANGOES**




HDMF



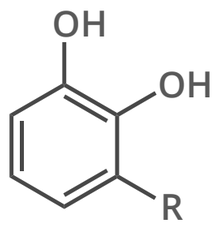

ETHYL BUTANOATE




γ-OCTALACTONE

Esters such as ethyl butanoate account for fruity notes in mango aroma. A major contributor to sweet notes is HDMF (4-hydroxy-2,5-dimethyl-3(2H)-furanone). Lactones such as γ-octalactone can lend a coconut-like aroma, while terpenes are also found in significant quantities and make minor contributions.

## MANGOES & CONTACT DERMATITIS




**Possible R groups**

$(CH_2)_{14}CH_3$

$(CH_2)_7CH{=}CH(CH_2)_5CH_3$

$(CH_2)_7CH{=}CHCH_2CH{=}CH(CH_2)_2CH_3$

and others...

URUSHIOL

Mangoes belong to the same family of plants as poison ivy. Urushiol, a mix of similar organic compounds which are found in poison ivy and can cause a rash to develop on contact with the skin, can also be found in mango skin. This means that some people who are sensitive to urushiol get contact dermatitis when chopping or eating mangoes.