



# Aroma Development and Volatile Composition in Mango (*Mangifera indica* L.)

**A Theoretical Report on the Biochemical Pathways, Ripening Physiology, and Quality Determinants in mango.**

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# Preface

This written report has been prepared as part of the course NPLK14014U - Fruit and Berry Crop Physiology and Quality at the University of Copenhagen. The course explores the physiological and biochemical factors determining fruit development, yield, and quality in relation to fresh consumption and processing. Emphasis is placed on how genetic, environmental, and management factors influence internal and external fruit quality, including the formation of secondary metabolites and sensory attributes such as aroma.

The present project is a theoretical study on the development and composition of aroma in mango, *Mangifera indica* L., The focus is on the biochemical formation of volatile organic compounds (VOCs) and their relationship to fruit ripening and sensory quality. The report integrates physiological and biochemical knowledge to describe how preharvest conditions, cultivar differences, and post-harvest handling affect aroma expression and the perception of fruit quality.

The assignment was carried out by Lucas Daniel Paz Zuleta (TZS159), MSc student at the University of Copenhagen, as an individual written report fulfilling the course requirements for NPLK14014U - Fruit and Berry Crop Physiology and Quality.

# Summary

## Signatures

Copenhagen, 20-10-2025

A handwritten signature in black ink, appearing to read 'LDPZ', is written over a horizontal line.

Lucas Daniel Paz Zuleta (TZS159)

20-10-2025

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# 1 Introduction

just to test if refferences work [1]



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# Bibliography

- [1] D. A. Aguirre-López et al. “Compuestos orgánicos volátiles presentes en el aroma de 17 frutas exóticas en Colombia: revisión”. In: *Revista Colombiana de Investigaciones Agroindustriales* 10.2 (2023), pp. 117–142.  
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