# CHAPTER 10

# STATIC AND DYNAMIC FRICTION COEFFICIENTS FOR NONPAREIL ALMOND VARIETY ON VARIOUS SURFACES

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## 1. INTRODUCTION

A Almond ( *Prunus dulcis* (Mill.) DA Webb, syn. *P.amygdalus* Batsch and *P. communis* (L.)) are related to Prunus species of Rosaceae family (Karatay et al., 2014). The homeland of almonds (Amygdalus communis L.) is Central and Western Asia, from where it spread to China, India, Iran, Syria, and Mediterranean countries. Like many other species, Turkey is the almonds' homeland and natural distribution area (Bilgin and Mısırlı, 2022). The amount of almond production for 2020 has reached 4.1 million tons worldwide. In the same year, 2,4 million tons of almonds were produced in the USA, 417 thousand tons in Spain, 222 thousand tons in Australia, 164 thousand tons in Iran, and 159 thousand tons in Turkey (Anonymous, 2022 **FAO)**. According to FAO data, the amount of almond production in the world increased by 54% in 2020 compared to five years ago. Knowing the health benefits of almonds consumers has led to an increase in the amount of production.

The important feature of almonds that makes them healthy

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We can say that friction depends on the roughness of the material and the friction forces. This causes an increase in energy consumption. Other studies obtained similar results ( Kaliniewicz et al., 2013; Visvanathan et al., 1996; Shafaei and Kamgar, 2017).

The static and dynamic friction coefficient information of almonds will be helpful in the design and material selection for post-harvest processing, transportation, processing, and storage equipment.

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