

## عنوان مقاله:

Determination and Comparison of Thermal Conductivity of Iranian Pomegranate Varieties

## محل انتشار:

هجدهمین کنگره ملی صنایع غذایی (سال: 1387)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

In this study, the thermal conductivity of two varieties (Alak and Aghamad-ali) of pomegranate (collected from Saveh, Iran, 2006) were determined in different moisture content and initial temperature range between 34 to 80% w.b (wet basis) and 5 to 20°C, respectively. Thermal conductivity values was determined by the probe method and bare – wire method. The first method was used for exocarp and mesocarp texture, and the latter one for seed. The thermal conductivity value of exocarp, mesocarp and seed varied between 0.15 to 0.42, 0.15 to 0.45 and 0.13 to 0.42 w/m°C in Alak whereas it varied between 0.18 to 0.5, 0.2 to 0.49 and 0.18 to 0.51 w/m°C in Aghamad-ali, respectively. Thermal conductivity in Aghamad-ali variety was seen more than Alak variety. Comparison between examined data and compared model of the class aggregate data, showed a nearly good correspondence. Only slight deviation of the average coefficients of determination from unity is seen between data. The ESMR and R<sup>2</sup> value for exocarp, mesocarp and seed were calculated 0.06 and 0.87, 0.15 and 0.82, and 0.10 and 0.89 in Alak whereas it measured 0.08 and 0.94, 0.14 and 0.80, and 0.05 and 0.92 in Aghamad-ali, respectively.

## کلمات کلیدی:

Pomegranate, Exocarp, Mesocarp, Thermal conductivity, Line heat source probe method, Transient technique, Iran

## لینک ثابت مقاله در پایگاه سیویلیکا:

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