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## Determination of some physical properties of tray dried Arapgir purple basil (*Ocimum basilicum*)

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Basil has been known as high amounts of antioxidants, essential oils and phenolic and aroma compounds. The amount and existence of these compounds depend on drying method, the biological characteristics of the basil and their volatile compounds. The basil leaves are used as either a fresh or dried form as a spice. Fresh and dried leaves of basil can be used for aroma additives in food or for medicinal purposes such as inflammations, colds, headaches and cosmetics. This study aimed to analyze the some physical and powder properties of tray dried purple basil, a species of its own, at different temperatures. The fresh purple basil samples harvest dates were during July and the basil was supplied from local producers in Arapgir town of Malatya in Turkey. Purple basil leaves are separated from its stem and the leaves were immediately tray-dried at 45°C, 50°C and 55°C for 7h, 6h and 5h respectively and the air velocity was 1.5 m/s. The moisture content, water activity (aw), color characteristics (L\*, a\*, b\*), bulk and tapped density, wettability and solubility times, flowability and cohesiveness values were determined. The moisture and aw values of all dried purple leaves decreased with increased temperature. The lowest moisture content and aw values were found 2.64 % (wet basis, wb) and 0.134 for purple basil tray dried at 55°C. The L\*, a\*, and b\* values of the purple basil leaves dried at different temperature changed between 23.05-26.81; 2.71-3.52; 0.94-5.17, respectively. The highest bulk and tapped density values of dried purple basil were calculated as 0.18 and 0.20 g/mL, respectively. Wettability and solubility time values changed between 190.5-324 s and 118.5-131.5 s. The results also showed that the dried purple basil has good flowability and low cohesiveness behavior.

### Biography

Ali Adnan Hayaloglu graduated from Inonu University in 1995. He has MSc and PhD degrees in 1999 and 2003, respectively. He has been working in the Department of Food Engineering, Inonu University (Malatya Turkey) more than 20 years (since 1996). He has been working on food flavor, volatiles, antioxidants, biochemistry of dairy foods, traditional and medicinal foods. He has 80+ international peer-reviewed papers and 5 book chapters with many people. He has managed more than 20 research projects. His papers were cited more than 1000 times (Web of Science) and 1700 times (Google Scholar) and h-index is 20. He is a Member of Turkish Science of Academy and Dean of Engineering Faculty.

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