

Abstract:

Turkey is the major producer of dried figs. "Sarlop" a Smyrna type cultivar is the standard variety for commercial drying in Aydın and İzmir provinces of Turkey. Dried figs can be directly consumed or used for processing as paste or canned. Dried figs exported to several countries are examined as to the mould and aflatoxin contamination. Because of these, where possible, it is necessary to shear dried fig for internal quality evaluation or for confectionary processing. To determine some of the mechanical properties (shear stress, shearing energy etc.) of dried figs has an importance in designing shearing systems. The empirical test stands somewhere between the fundamental rheological test and the service or imitative tests. In this study, some mechanical properties of dried fruits of Sarlop variety are examined. Shear stress, shear force, shear energy and deformation values are determined under two different load speed conditions. Dried figs evaluated in this research had a mean shear energy of 0.62 J for 25 mm/min and 0.75 J, for 50 mm/min and shear forces were 0.16 kN and 0.17 kN, respectively. It was determined that the obtained data were not affected by the loading speed.