

ABSTRACT: This study was conducted to determine the effect of wheat, soybean, and tef flour blending ratio on the rheological property of wheat-based composite dough. The experiment was conducted using a custom design. The corresponding proportion of wheat from 70% to 90%, soybean 5% to 15%, and tef 5% to 15% were taken from a similar study, and using wheat (100%) flour bread as a control. Supplementing soybean and tef to wheat increased Dough Development Time (DDT), dough Stability Time (ST), Time to Breakdown (TB), Farinograph Quality Number (FQN), of the blended dough and decreased Water Absorption (WAS) and Mixing Tolerance Index (MTI). Maximum WAS was obtained at control bread. DDT and ST were optimum at 70% wheat, 15% soybean and 15% tef, and 75% wheat, 15% soybean, and 10% tef, respectively. High values of TB (18.00 min) and FQN (180.00 FU) were obtained at the levels of wheat 70%, soybean 15%, and tef 15%. In general, the proportion of wheat from 80% to 85%, soybean from 5% to 10%, and tef from 5% to 10% were found optimum for the rheological property of wheat-based composite dough.

Keywords: Blending ratio; Dough; Farinograph; Rheological property