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## Effect of cereal cell wall on Rheological characteristics of wheat flour

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In the current study, the effect of cereal cell wall addition on farinographic and mixographic characteristics of wheat flour dough was observed. For the purpose, two varieties of each cereals i.e. wheat (Ujala-16 and FSD-08), barley (Jau-87 and Haider-93) and sorghum (Sorghum-11 and JS-02) were procured from Ayub Agriculture Research Institute (AARI), Faisalabad. In phase I, cell wall was isolated from cereals according to respective method. In phase II, cereal cell walls were added in wheat flour with concentrations of 1 and 2 % and rheological properties were determined through farinograph and mixograph. Results revealed that the addition of cereal cell walls significantly improved rheological properties of wheat flour. Higher increase in water absorption capacity, dough stability, peak height and mixing tolerance index of dough was observed with the addition of barley cell wall followed by wheat

and sorghum cell walls at 2 %. Moreover, dough development time, mixing time and softness of dough were decreased more significantly through barley cell wall than wheat and sorghum cell walls. Conclusively, utilization of cereal cell wall in cereal based products improve product quality.

### Speaker Biography

Farhan Saeed is working as assistant professor in Government College University Faisalabad-Pakistan since 2012. He did postdoctoral studies from University of Queensland, Brisbane Australia in 2016 and completed PhD from University of Agriculture, Faisalabad-Pakistan in 2012. He visited University of Massachusetts, Amherst, USA under Pakistan program for collaborative research, HEC in 2015. He has published more than 70 papers in reputed journals with impact factor more than 110. He has 08 book chapters in international books. He presented his research works in international level at Huazhong University Wuhan, China and Conference on food properties in Sharjah. He also got two research projects funds from Higher Education Commission Islamabad, Pakistan.

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