

## Utilization of mixolab to predict the bread making quality of Indian wheat varieties

**Vandana Chaudhary and Bhupender S. Khatkar**  
Guru Jambheshwar University of Science and Technology, India

Wheat is the leading cereal produced, consumed and traded in the world. Various quality tests are carried out to evaluate the bread making potential of a wheat variety, but these tests are time consuming and/ or labour intensive. A new instrument mixolab has been developed which has the capability to measure the dough properties and the pasting behaviour of flour at the same time. Hence, in the present research mixolab was used to assess bread making potential of diverse wheat varieties. The specific loaf volume (SLV) was significantly correlated with mixolab dough development time (DDT) ( $r^2=0.880$ ), dough stability ( $r^2=0.942$ ), C2 ( $r^2=0.890$ ) and glutenin/ gliadin ratio ( $r^2=0.802$ ) indicating the dependence of SLV on protein quality. Stepwise multiple regression was used to find prediction equation for bread quality (SLV) in terms of dough stability and C2 which showed a high multiple correlation coefficient of 0.911 for SLV. With the help of prediction equation it was concluded that the dough stability and C2 are the promising parameters of mixolab to predict the bread making quality of wheat varieties.

### Biography

Vandana Chaudhary has graduated her Master Course at the age of 22 years from Chaudhary Charan Singh Haryana Agriculture University, Hisar and is pursuing her Ph.D. from Guru Jambheshwar University of Science and Technology, Hisar. She has published more than 10 papers in reputed journals.

[dhakavandana18@gmail.com](mailto:dhakavandana18@gmail.com)