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### Hulless barley as a promising source to improve the nutritional quality of wheat products

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### Quality and Nutritional Characteristics of wheat and barley varieties used in the study

#### *Wheat Varieties*

	<b>C 306</b>	<b>HS 490</b>
Year of Release	1965	2007
Growing Zone	North Western Plains Zone/ North Western Plains Zone	Northern Hills Zone
Growing Conditions	Rainfed, Timely sown	Restricted Irrigation, Late sown
Pedigree	RGN/CSK3//2*C591/3/C217/N14/ /C281	HS364/HPW114//HS240/HS346
Av. Yield (Q/ha)	2.6	3.1
Protein (%)	11.7	9.1
Test Weight (Kg/hl)	78.2	75.0
Hardness Index	89	20
Sedimentation value (ml)	40	34
Chapatti score	8.1	-
Biscuit spread factor	-	11.41
Wet gluten (%)	30.7	20.9
Iron (ppm)	47.5	36.5
Zinc (ppm)	42.9	35.2

Source – Anonymous. 2015. Progress report of the All India Coordinated Wheat and Barley Improvement project 2014-15. Wheat quality, Vol. IV. (Eds. R.K. Gupta, D. Mohan, Sewa Ram, Sneh Narwal and Indu Sharma). ICAR-Indian institute of wheat and barley research, Karnal, India.

**Barley Variety (BHS 352) – Six row, huskless food barley**

Year of Release	2003
Growing Zone	Northern Hills Zone
Growing Conditions	Rainfed, Timely sown
Pedigree	HBL 240/BHS504//VLB 129
Protein (% dwb)	14.3
Test Weight (Kg/hl)	68.7
β- glucan (%)	6.4

Source - Anonymous (2014). Progress Report of All India Coordinated Wheat & Barley Improvement Project 2013-14, Vol. VI. Barley Network. Eds: A.S. Kharub, D Kumar, J Singh, V Kumar, , R Selvakumar , AKhippal, R Malik, A Verma, S Katare and InduSharma. ICAR-Indian Institute of Wheat & Barley Research, Karnal, India.