Response of bread wheat (*Triticum aestivum* L.) and durum wheat (*Triticum durum* Desf.) genotypes to different sowing time on growth, yield attributes and yield in North Gujarat agro-climatic conditions

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Abstract: A field experiment was conducted on loamy sand soil at the Agronomy Instructional Farm, S. D. Agricultural University, Sardarkrushinagar to study the response of bread wheat (*Triticum aestivum* L.) and durum wheat (*Triticum durum* Desf.) genotypes to different sowing time in North Gujarat Agro-climatic conditions during *Rabi* season of the year 2008-09. The treatment consisted of four sowing times *i.e.*, 10th November (early), 25th November (timely), 10th December (late) and 25th December (very late) and four wheat varieties (*viz.*, GW 322, GW 496, GW 173 and GW 1139). The results of experiment revealed that the plant population at initial and harvest, test weight, harvest index were remained unaffected due to different sowing times. Plant height of wheat genotypes increased remarkably higher under 10th and 25th November sowing. While, days to 50 per cent heading and days to physiological maturity were noticed significantly higher up from 10th November to 10th December sowing times. The values of number of spikes per meter $^{-2}$ (292 to 304), length of spike (7.41 to 7.83 cm) and number of grains per spike (40.86 to 43.88) was noticed higher up to 10th December sowing times. The values of yield attributes *viz.*, number of spikes per meter $^{-2}$ (305), length of spike (8.12 cm) and number of grains per spike (42.24) were observed in variety GW 322. However, plant population at initial and harvest, harvest index and protein content were remained unaffected due to different varieties. Significantly higher values of yield attributes *viz.*, number of spikes per meter $^{-2}$ and straw yield 6338 kg ha$^{-1}$ which was increased by 4.84, 3.49 and 21.51 per cent higher over varieties GW 496, GW 173 and GW 1139, respectively.

Key Words: Wheat, Durum wheat, Genotypes, Sowing time


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