Sprouting in wheat is a problem for both the producer and for the industry. Decreases the yield potential of crops, negatively affects the pH and, above all, reduces the commercial value of the grain, because depending on the level of germination, this grain is eventually capable of use only for animal consumption. It is adopted as an international benchmark for the diagnosis the method of Hagberg Falling Number (NQH). The objective was to determine the technological quality of wheat flour from grain production by adopting four row spacings and two different cultivars. The experimental design was randomized blocks with four replications in a factorial scheme 4 x 2, where the first factor refers to the spacing (0.20 m, 0.28 m, 0.36 m, 0.40 m) and the second factor refers to the cultivars (BRS 150 and CD Tarumã). The experiment was conducted in Santa Tereza do Oeste-PR in May 2011 and quality assessments were performed at the Laboratory Analysis of Wheat Flour in FAG. The following parameters were analyzed with the method NQH no. AACC 56-81B (1999), ash according to AACC Method no. 44-15 (1995) and color according to AACC Method no. 14-22 (1999). Data analysis was performed by employing ANOVA statistical program Sisvar (5% significance level). There was no statistical difference between the spacings adopted, however, there were differences between the materials. Cultivar CD 150 is above the BRS Tarumã NQH (352 and 314 respectively) in color (L * 90.43 and 89.32 respectively) and ash (0.62% and 0.68% respectively).